Human form Lesson 6

Famous Artists Painting Course Inc.

Westport, Connecticut

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AUGUSTE RENOIR
The Bathers
Collection of Carroll S. Tyson

The human form is presented here in a wealth of poses, each natural and graceful. Problems of foreshortening are handled with casual ease. The artist apparently has no difficulty in giving the figures a three-dimensional, plastic quality. At first glance it might seem almost impossible to achieve a technical control to equal this, and yet it is not really so hard to draw poses of this kind if you approach the problem by the methods demonstrated in this lesson. Learn to view the different parts of the figure as cylinders and spheres; then draw these simple forms through to the other side. Master this lesson carefully, step by step, and you will be surprised to discover how soon you will be able to draw the figure convincingly in any pose you can imagine.

The human form

The human form is one of the most fascinating and rewarding subjects any artist can tackle, whether he is a hobbyist or a professional. Undoubtedly you have often attempted to sketch some member of your family or a close friend. You may even have developed the pleasant habit of sketching people – on the bus, in a restaurant, or at the beach.

It's only natural that you should want to sketch people because, after all, few subjects interest any of us more than the men, women, and children we see around us. As human beings, we're a gregarious lot. We soon get lonely if we don't see other people occasionally, even if solitude means a great deal to us. We want to know what others have been doing, what they plan to do, and what they think about the things that interest us. And since personality and point-of-view are invariably summed up in the face and figure of each individual, we enjoy seeing and sketching people we don't know, because even the outward appearance of people can tell us a lot about them.

Someone has said that we never really get to know anything thoroughly until we try to draw it – and that statement is particularly true when it comes to people. To draw someone, we must study that person carefully in every detail. We must compare the proportions and construction of the various individual parts of the body with other parts – and with what we consider ideal proportions. We must examine the structure of the features, and study the details of expression if we want to make a likeness. We must decide what characteristics are important, and which are irrelevant. When we have finished drawing anyone, we are better acquainted with that person – even though our drawing has not been entirely successful.

The chances are that your drawings of people may not have been as good as you would have liked, in the past. You may even have reached the conclusion that drawing people is too hard for you to attempt very seriously. Actually, drawing people is really no more difficult than drawing houses or trees or any other object. The big secret is in knowing how to approach the problem – and that is just what we will show you in this and the following lessons. To get the most out of these lessons you must be very patient, and willing to advance one step at a time. If you *are* patient, and follow our suggestions very carefully, *you will find that your progress will amaze you.* Before you know it you'll be able to draw people in any position, engaged in any kind of action. Your figures will look convincing–alive and three-dimensional. With a little practice you'll be able to get a good likeness, if you want to. And even if you are specializing in landscape painting, you'll find yourself tempted to insert figures now and then just for the fun of painting them, and because they will give the scene scale and a touch of human interest.

As you become more proficient in drawing the human form, you may devote more and more time to this subject. Such a progression is only natural, because artists of all periods have discovered that the human figure offers possibilities for expression that are not provided by any other subject. Glance through any collection of art masterpieces, and you will see that until recently artists found the human figure the most intriguing subject they could depict.

There is no reason, of course, why your drawings of the figure should be confined to realistic portraits of your family and friends, or even sketches of a model. The human figure, in one form or another, can become an essential source of inspiration and source material for any kind of painting you may want to do, in any style except the most abstract where reference to *any* kind of natural or identifiable object is usually avoided.

The human figure in art is actually a *symbol.* It "stands for" a lot of things that no other shape could convey. When we draw a human figure that is obviously not an attempt at a realistic portrait, we are using it to "say something" in our paintings, whether we realize it or not.

The statues carved by the ancient Greeks, for example, were not realistic copies of living models. They were *idealized* people invented by the artist. They presented his concept of absolute beauty, and he seemed to be saying, "This is my dream of what the perfect human being should be like – a synthesis of perfect

Collection of the artist

PICASSO. Three Graces

In this modern version of a favorite classical theme Picasso has stressed the basic form of the body by modeling it simply in two values. When an artist is *thinking* in terms of form he can accomplish wonders by suggestion. The form is only partially modeled here but we accept its solidity. Notice how the forms gain three-dimensional volume by contrast with the diaphanous drapery and the hair.

AL PARKER. Nude

The solidity of the figure is established as simply as possible, with only the most necessary modeling, because the artist wished to emphasize its outer *shape*. To stress these outer curves he has silhouetted the figure against strong verticals, and reinforced the curves by echoing them in the lines of the chair.

Courtesy Ladies' Home Journal

proportions, grace, and rhythm." Because he could imagine nothing more beautiful that these figures, and because he could not find such perfection on earth, he felt that these creations had the quality of gods – they were superhuman in their ideal attributes. It is obvious that the Greeks began with the physical world, and sought the ideal world through a perfecting of the real world which surrounded them.

By contrast, the medieval artist began with spiritual ideals. Instead of trying to present physical beauty, he was concerned with such abstract concepts as love, devotion, self-sacrifice, humility, self-restraint. To him this physical world, in which he often had a hard and unpleasant experience, was only a temporary affair. Heaven was his home. His art, therefore, celebrates a beauty of the soul instead of the body. For this reason many of the medieval figures were distorted. Often the body was elongated, and the pose tended to be somewhat stilted and formal. The whole approach of the artist to his figures tells us immediately that here is a spiritual concept, pure and otherworldly in its nature.

With the Renaissance the wheel went round again. Men rediscovered the excitement and beauty of the natural world. In this era of exploration and discovery the human figure took on new significance, and artists began to examine the physical body for what it is – a three-dimensional organism of bones, tendons, muscles, flesh and blood. Painters delighted in a realistic presentation of rippling muscles, or concentrated on capturing the beautiful tints and tones of skin texture. It was a proud, exciting period when the world seemed suddenly to have been infused with new life. Men were glad to be human, and fascinated with the business of depicting the human body in paint.

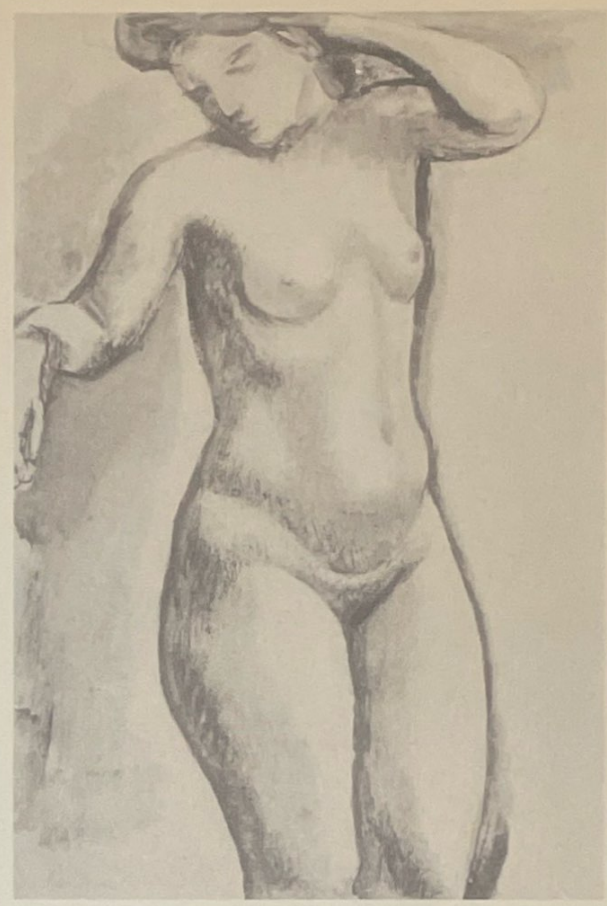
Today, once again, realistic painting of the human figure has to some extent gone into eclipse. Many artists concentrate exclusively on landscape and still life, following the example of the French schools of the early twentieth century. Other artists have turned away from realism and sought to find their artistic satisfaction in expressionistic or abstract styles, in which distortion plays a major role. Still others have gone a step further and attempt to avoid any recognizable, natural subject matter in their paintings, concentrating rather on "pure" design relationships of line, color, and abstract or geometric shapes.

It is eternally true, however, that there is no vehicle so subtle or so effective for the expression of human thoughts and emotions as the human figure. The artist who has mastered drawing of the human figure can call human personalities to life at will, and depict the specific attitudes, actions, mood, and emotions which will best express the drama he wants to portray. He transports the observer to a world far removed from immediate experience, and enables him to live, momentarily, an imaginary existence with imaginary people. The great artists are dramatists in paint, who consistently help their fellow men bridge the gap between imagination and reality. If you hope to become that kind of artist, you must learn to control the human figure for your own purposes.

From previous experiments, you may have concluded that drawing the figure is an extremely difficult job. We are going to show you that it *can* be much easier than you think. But you must be willing to progress *one step at a time,* mastering each step as you go along.

The chief reason most students have trouble drawing the human figure is very simple: they want to start right off by sketching a fully clothed model in a complicated pose. They spend a great deal of time worrying about details of features, anatomy, and drapery. They try to capture the expression on

Collection of the artist



BOARDMAN ROBINSON. Nude

Through careful generalization and modeling, the artist has given the individual forms of the body a feeling of swelling solidity. Dark moving edges serve to contain these forms, give the drawing life, and emphasize the organic unity of the figure.

Courtesy of The Art Institute of Chicago

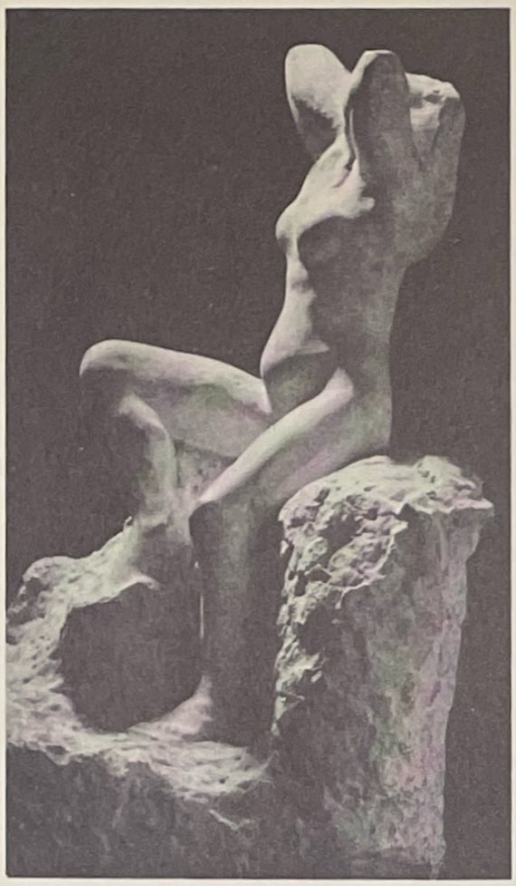
MAILLOL. Reclining Nude, 1932

The figure is in repose, but there is strong tension in the twisting relationship between the upper and lower body. The forms are large and very solid, but modeled with the greatest subtlety. The very volume of these forms adds to the effect of bursting life felt in the strong, moving lines which contain the figure.

PICASSO. Mother and Child

A feeling of impassive monumentality characterizes this sculpturesque composition. Mother and child are presented as basic forms; the figure group has the quality of a "composition of cylinders." The modeling is exceedingly simple, in many areas no more than suggested. The forms seem very solid, however, because they are set against a background of completely flat planes.

Human form

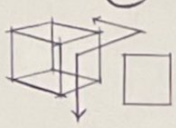


The most important fact about the human figure is that it has bulk and weight, as a rock has bulk and weight. The figure has *depth* and *thickness*, as well as height and width. This famous statue by Rodin is called "The Awakening." The figure is conceived as freeing itself dynamically from the insensible rock. Like the rock from which it came, the figure is *solid*. Whether the artist constructs the human body out of clay or stone, or draws it on a flat surface, he must always think of it as a *three-dimensional object*.

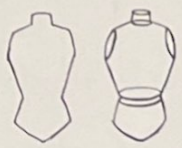
Glossary

You will find that the terms explained below are used frequently in this and the following lessons, as well as in our letters of criticism. Study the definitions carefully, and refer back to this Glossary from time to time if necessary.

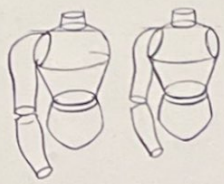
DRAWING THROUGH — The glass at the left has been "drawn through to the other side"; *all* the structural lines can be seen. In the same way, you must put down *all* the structural lines when you are drawing a solid, opaque object, whether you can *actually* see them or not.



THREE-DIMENSIONAL — The square at the right has only *two* dimensions — height and width. To make objects seem three-dimensional, you must also draw in *depth*, as shown in the *three-dimensional* cube at the left.

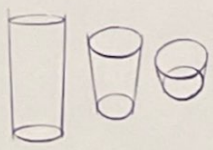


CONSTRUCTION VS. OUTLINING — An object that is "well constructed" has depth, as well as height and width. If we say that the construction of your drawing is bad, we will mean either that you have merely *outlined* your forms, forgetting about depth; or else that you have made mistakes in drawing the basic structural lines.



RELATIONSHIP OF PARTS — Each separate form in the drawing at the extreme left is properly proportioned, but the different forms are not properly "related" to each other. The upper arm and the lower arm are drawn at quite different scales from the scale used in drawing the torso. Make sure that the individual forms have the right proportions; also make sure that when those forms are put together they have the proper "relationship" to each other, as in the drawing at the right.

MODIFIED CYLINDERS — The cylinder at the left is a geometric object, perfectly regular in shape and proportions. The tapered cylinder at the right is essentially the same basic cylindrical *form*, but the *shape* has been modified slightly. This is what we call a "modified cylinder."



FORESHORTENING — When an object is tipped toward you or away from you, it is said to be "foreshortened." It seems to diminish in size and change in shape as it goes back. In the case of the cylinder notice that the length of the sides becomes shorter and the ellipses more open as the amount of foreshortening is increased.

the model's face, get a good likeness, and render textures convincingly. But in their concern about these *details* they lose all sense of proportion, construction — and, most of all, the solid form of the figure.

It has been our experience that there is only one sound way to approach the problem of drawing the human figure. You must begin by having a very clear concept of the *basic form*. The human body is not a two-dimensional symbol on a flat surface; nor is it a paper doll with such decorative details as hair, eyes, teeth, clothes, shoes, etc., drawn on top of it. The human figure is first and primarily a *three-dimensional* object, a solid object with bulk and weight. It is certainly as three-dimensional as a piece of sculpture in wood, marble, or bronze.

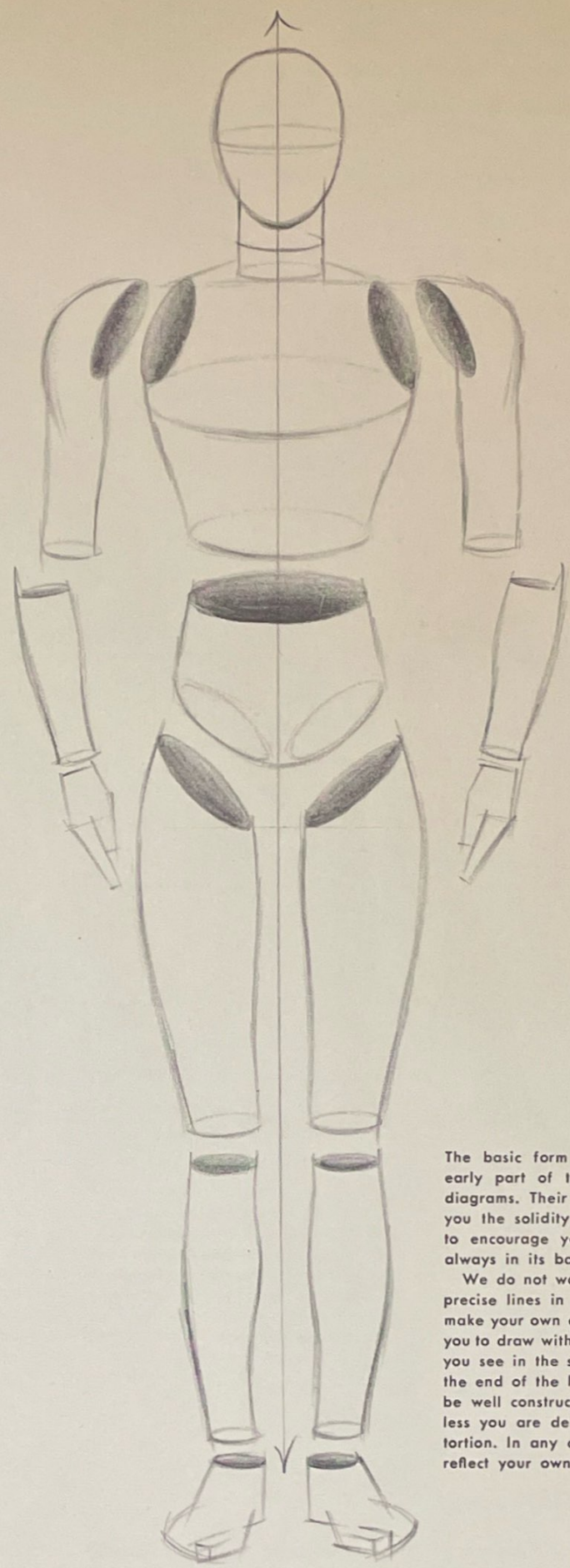
This solid form of the human body looks complex. It is obviously not a single sphere or cube or cylinder. But when we examine it we discover that this complex form is actually a construction of very *simple* forms. These simple forms are closely related to the spheres and cubes and cylinders you learned to recognize and draw in Lesson 2. If you can draw those forms well, you will have no difficulty putting them together to make the total *human* form.

In this lesson we will show you how to analyze the human figure in terms of these simple, basic forms. We will show you what the *proportions* of these individual forms are, in relation to the total form. We will illustrate the methods by which these individual forms are connected, and demonstrate how the parts move. In other words, we will explore the basic *construction* of the figure. Then we will show you how you can draw this basic human form in any position, engaged in any kind of activity. We will also explain how the form changes as it develops from child into adult. Finally, we will demonstrate how the members of the Faculty use this simplified approach to figure drawing in preparing their own illustrations.

The work you do in connection with this lesson will be the most important work you will ever do in studying the human figure. Once you have learned to control the basic form, the rest will be easy. *But don't give in to temptation and rush right on to attempt sketches filled with anatomical details.* Concentrate for the present on this basic form figure until you can do anything you want with it. Draw it in as many positions as possible. Look for it in photographs of people, paintings, and above all in the people you see around you.

In the following lessons we will make detailed studies of anatomy, examining the bone and muscle structures which hold the basic form together and make it move. We will also consider special problems involved in drawing individual parts of the body, such as the head, the hands, and the feet. You are not prepared to go on to that material yet, however, and if you try to jump ahead before you are ready you will regret it.

These essential facts about the human form are as basic and invaluable to you, as an artist, as the simple multiplication table is to the mathematician. You will be drawing the human figure the rest of your life, so build your knowledge and control of it as solidly as you can.



The basic form drawings throughout the early part of this lesson are essentially diagrams. Their main purpose is to show you the solidity of the human figure and to encourage you to think of the figure always in its basic mass.

We do not want you to copy the rather precise lines in these diagrams when you make your own drawings. Instead, we want you to draw with the same kind of freedom you see in the signed faculty drawings at the end of the lesson. Your figures should be well constructed and proportioned unless you are deliberately striving for distortion. In any case, they can and should reflect your own personality.

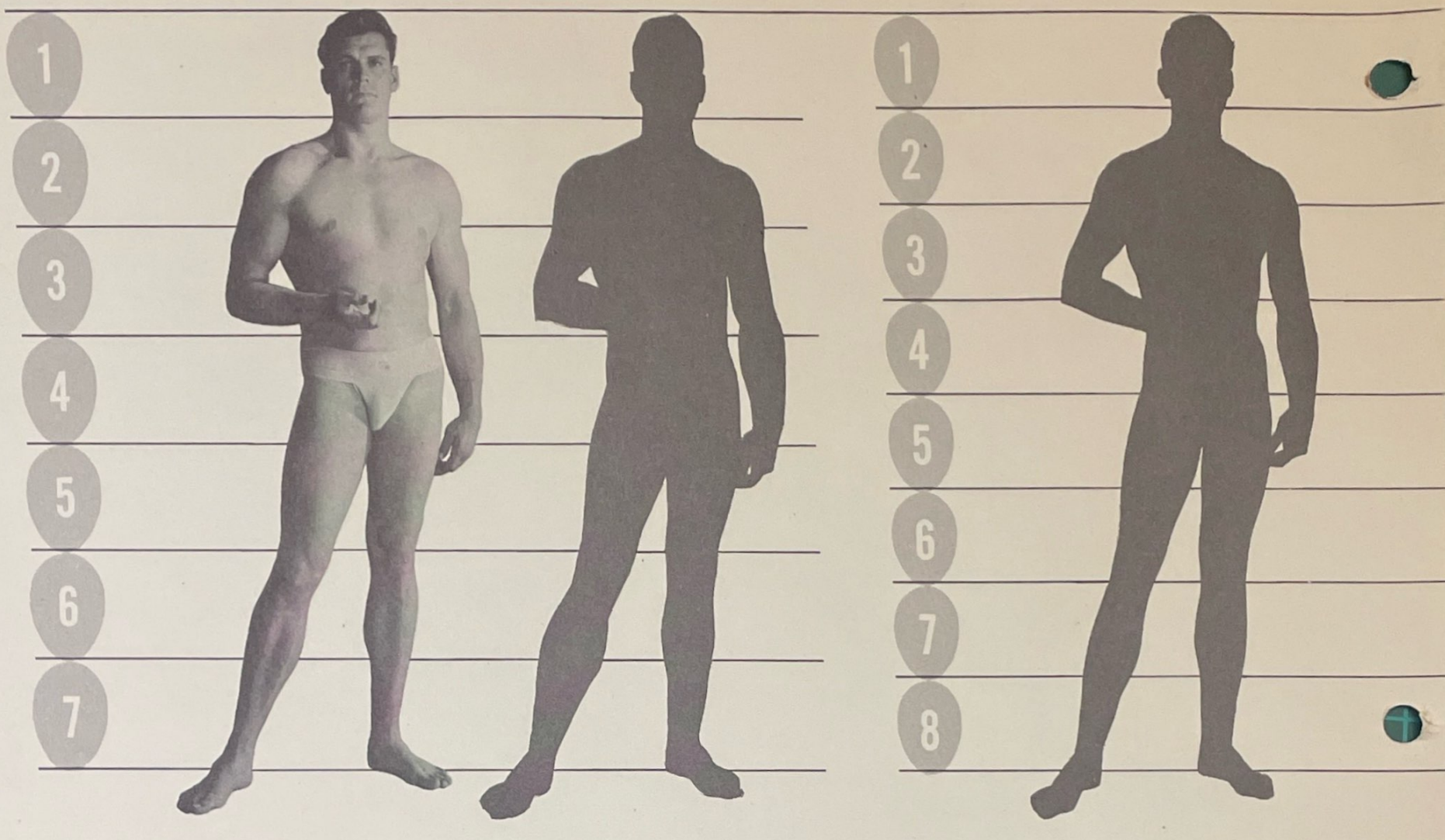
The basic form figure

The basic form figure on the right demonstrates the all-important principle emphasized throughout this lesson — the fact that the human body is made up of *simple, solid forms*. The basic form figure presents the body in its essential *masses*. Every distracting element has been eliminated. Think of the form figure as if it were carved out of heavy wood; it is solid, three-dimensional. In this drawing the form figure has been pulled apart, or "exploded," to emphasize the various separate elements. They consist of head and neck; upper torso and lower torso; upper arms, lower arms, and hands; upper legs, lower legs, and feet.

Now compare the form figure with the photograph of the living model to the left.

Are the model and the basic form figure similar in basic mass and construction, with the same association of parts? *Yes*. In both model and form figure the neck, the arms, the legs, and the torso are essentially modified *cylinders*. The head is basically a simple *sphere*. The hands can be reduced to *cubic* forms, while the feet are combined *cone* and *cube* forms.

It is extremely important in the beginning to view the body in terms of these simple, basic forms, understanding the essential *masses* of the separate parts, and placing these in their proper proportions and relationships. For the present you must ignore hair and features, as well as the more subtle curves resulting from underlying bone and muscular structure. Once you can control and draw the basic forms properly, you will have little trouble drawing the details of these forms.



1 The head is the basic unit by which the figure is measured. In the head-unit "ruler" above, the vertical height of the head is used to make vertical measurements of the body. Thus we say that the model at the right is a "seven-head" figure.

2 This model is a man of average height and good physical development. His total height is seven times the height of his head. If you ran into him accidentally in real life you would consider him well-proportioned. Yet when we draw him on paper, as the silhouette demonstrates, he seems to be much broader and stockier than most Americans think the "ideal" man should be.

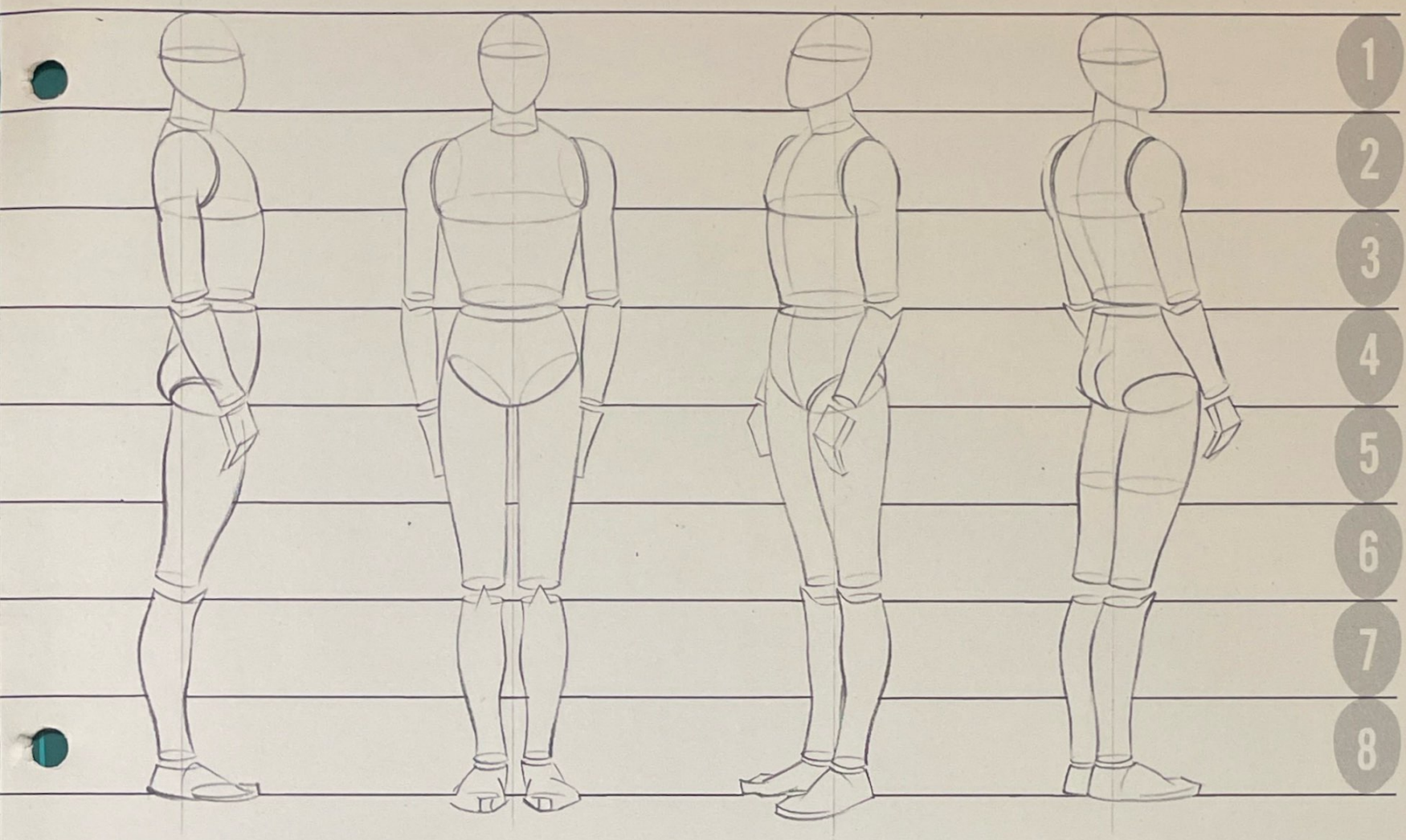
3 In the ideal figure the body is *eight* times the height of the head, as we have diagramed above. Notice that although the *total* height of this eight-head figure is the same as that of the seven-head figure at the left, the size of the head has been reduced in the eight-head figure. All the other parts of the figure have been elongated proportionately, so that the figure now seems slim and graceful.

Proportions

The artist uses the human *head* as his basic unit of measurement for the entire human figure. The head can be viewed in two ways, however — in terms of its *height,* and its *width*. The height of the head from chin to top of skull is the ruler by which all *vertical* measurements are made. For example, the artist speaks of an "eight-head figure," by which he means that the figure is eight *vertical* heads high. It is more convenient to use the *width* of the head in making horizontal measurements. The shoulders, for instance, are three head *widths* across.

If you look at the people around you in real life, you will see that they differ considerably in proportions. One man has a head which we think is large for his body, another has a head which seems smaller than normal. The great majority of people, however, are reasonably similar in proportions and shape at any given age. It is because of this fact, of course, that it is possible for clothing manufacturers to design "ready-made" suits and dresses. Most people can be fitted into standard patterns successfully with only minor adjustments.

On this basis we could easily arrive at average proportions for the adult figure. There is a distinct difference, however, between the "average" and the "ideal." Artists have always sought to discover the *ideal,* the *perfect* figure. The Greek sculptors, for example, established a "canon" for the human figure. This canon was a set of proportions for the *ideal* figure. In the same way later artists, such as Leonardo and Dürer, set up their own canons of proportions for the ideal figure. In many respects the concept of the ideal changes from nation to nation, and from period to period. The hefty, voluptuous beauties of the Rubens murals were much admired in their day, when women were considered beautiful only if they had achieved monumental proportions. It is obvious that today popular taste has swung in the opposite direction.

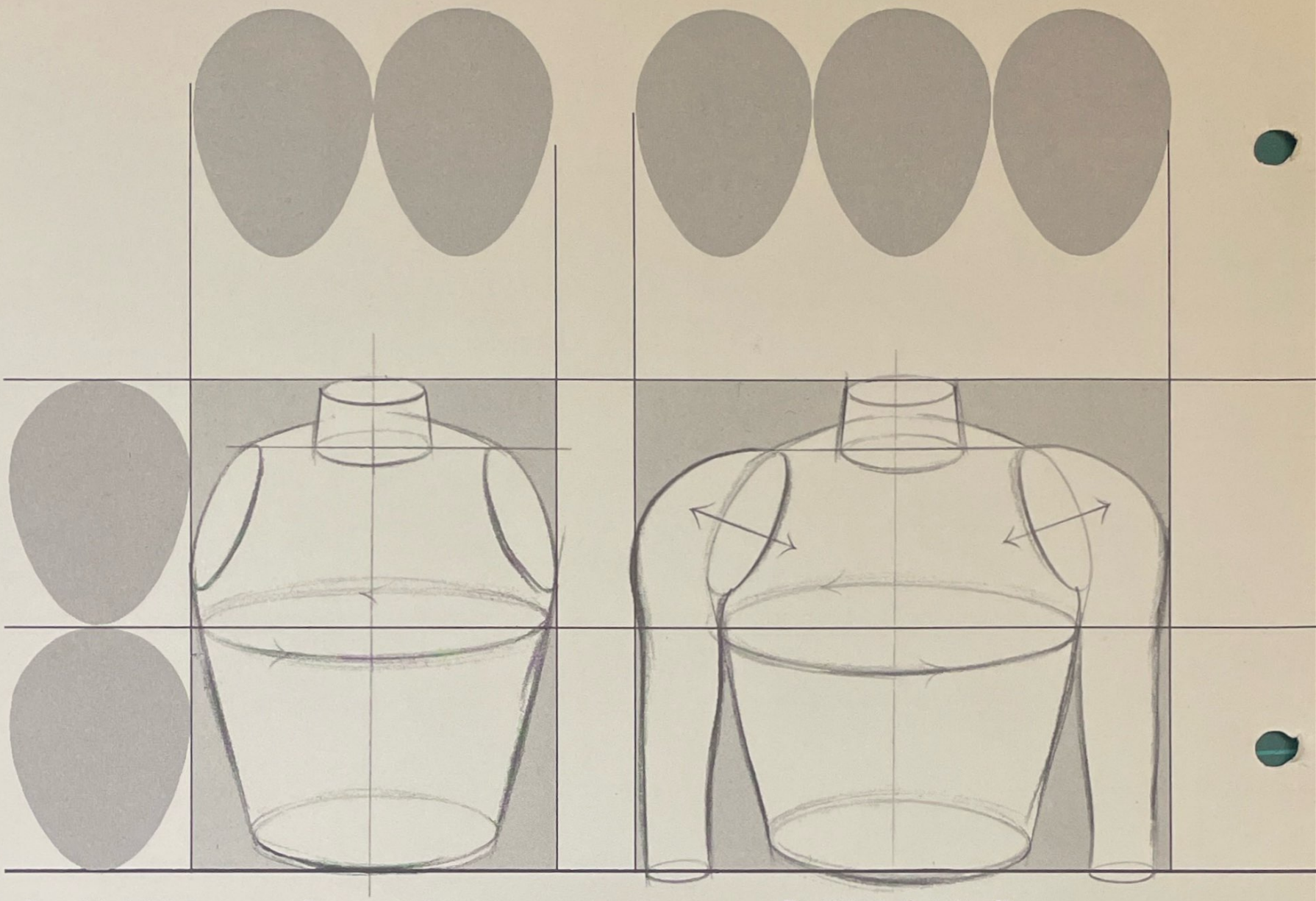


Here the eight-head figure is presented in basic form, as seen from side, front, three-quarter front, and three-quarter back views. Study the relationship of the different parts of the figure, noticing how they are balanced on the vertical axis.

What the public at large considers beautiful, and what we artists consider beautiful, may be quite different things. It is our privilege to set up our own canon of proportions. This canon need not necessarily be the same as the measurements of the present-day *average* man or woman. In the photograph on the opposite page, the model is a well-developed male of *average* height. He is a "seven-head figure." Most people today, however, do not consider a seven-head figure tall enough to satisfy their concept of the ideal. They prefer the eight-head figure, which they feel handsomer and more elegant. Since we must establish some point of departure, we have therefore chosen the eight-head figure as the standard for this course, in the belief that this selection will meet with the approval of the majority of our students.

On the right-hand side of the facing page you will see how the eight-head figure looks. To make this figure the same height as the seven-head figure we divide the height into eight parts. One of these parts serves as the basic head measurement unit. After drawing in the head, we position the other parts of the body along the vertical axis. The *body alone,* from neck to feet, now measures *seven* head units, instead of six. The parts are all slightly elongated because of this, and as a result the figure seems much better proportioned.

The eight-head figure is today considered the "ideal." It is this set of proportions which we will expect you to follow throughout the course, unless we specifically request different proportions. Occasionally you will want to draw people who are obviously *not* average. If you want to caricature a person, or show that he is shorter than average or taller than average, you can do this very easily by retaining the same *width* measurements used to draw the eight-head figure, but reducing the height to five or six heads, or increasing the height to nine or ten heads. However, any departure from the eight-head formula should be deliberate. The drawings above show you how the eight-head basic form figure looks in different views.



None of the individual parts of the figure are more than two heads high.

The upper torso is the largest part of the body.

The eight-head *male* shoulders fill out a space three heads wide.

The individual parts

The chart on these two pages presents the individual parts of the idealized eight-head figure side by side, so that you can compare the parts directly and see how large they are in relation to each other.

The upper torso, the upper leg, and the lower leg including the foot are all approximately two heads high. The upper arm, and the lower arm including the hand are slightly less than two heads high. The lower torso is one head high, or half as long as the upper torso, the upper leg, and the lower leg.

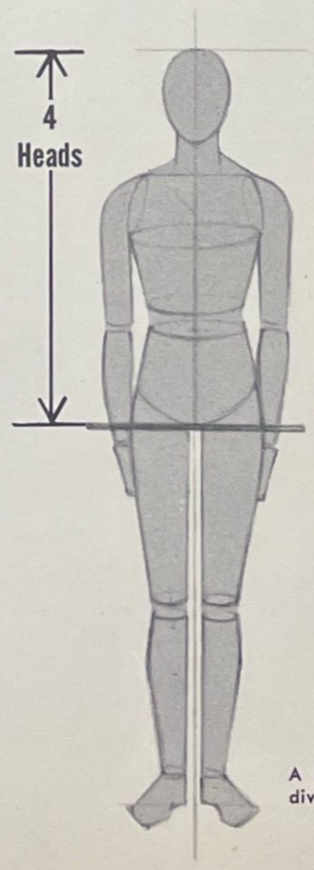
Use the heads at the top of the page to measure the *width* of the parts. It is important that you have a good *visual* idea of how wide each part is in relation to its length, and in comparison with the width of the other parts.

The lower torso is only half as high as the upper torso. Notice that the male torso is less than two heads wide at the hips, and becomes still narrower at the waist.

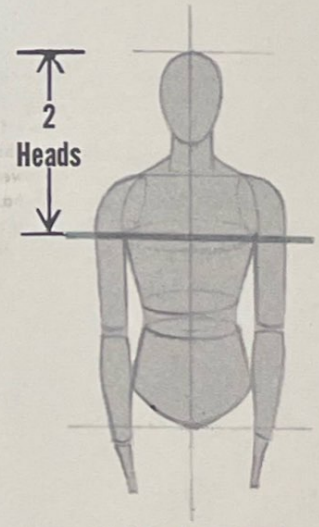
The upper leg of the male figure is two heads high and one head wide. The lower leg is the same length as the upper leg (foot included), but the lower leg is little more than half a head wide.

The upper arm is the same length as the lower arm (hand included). Both upper and lower arm are less than two heads high. The shoulder itself is about three-quarters of a head wide, while the rest of the arm and elbow are about half a head wide.

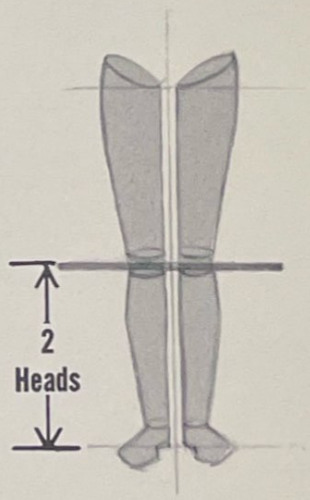
The foot is about one vertical head measurement long; the hand is a little over two-thirds as long.



A line drawn across the crotch divides the whole figure in half.



A line drawn across the nipples and just below the armpits divides the upper part of the figure in half.

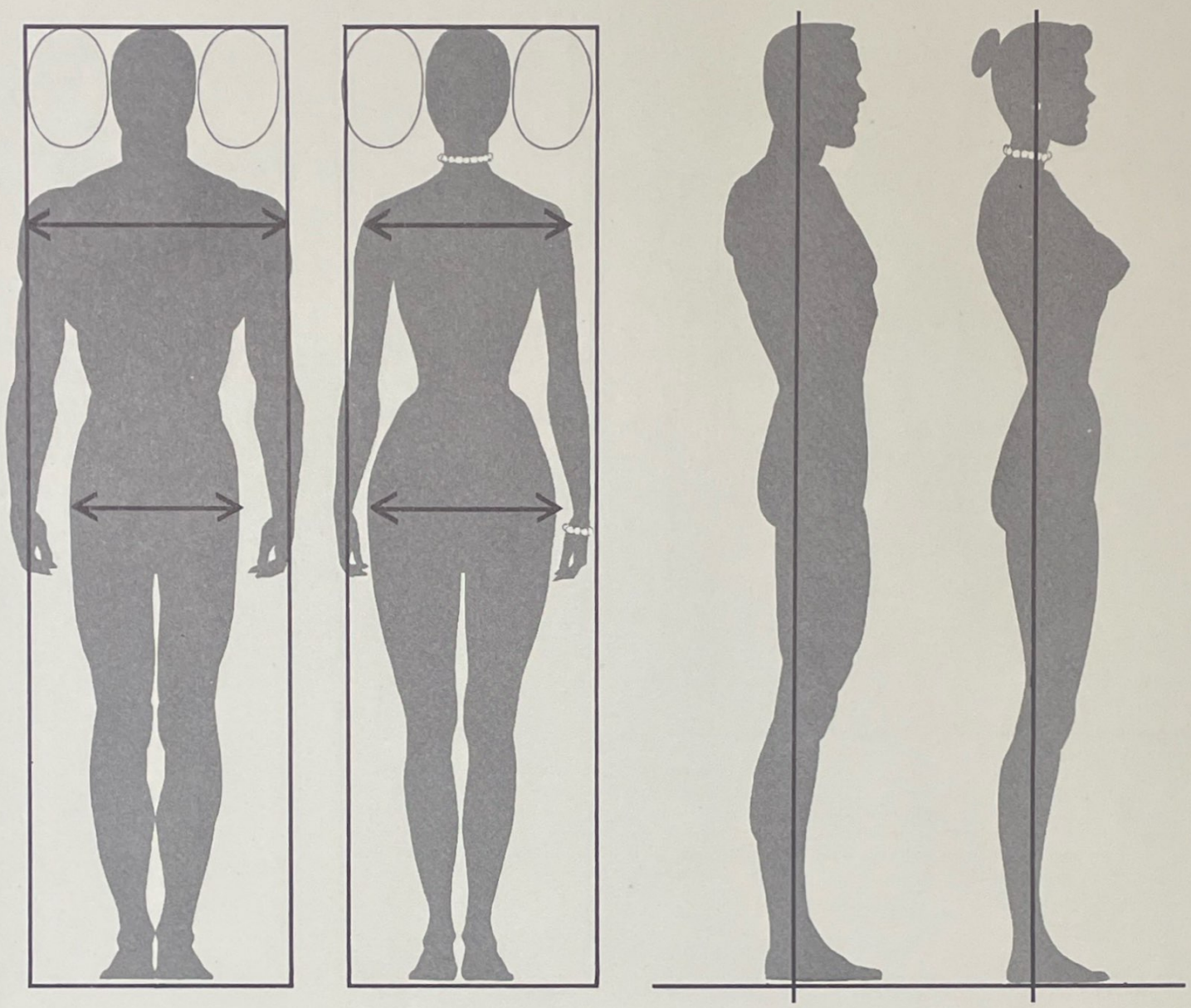


A line drawn through the knees divides the lower part of the figure in half.

Structural differences – male and female

Up to this point we have presented the male figure proportions exclusively. The female figure is constructed in the same manner, following the eight-head formula. Important differences between the male and female form are considered on this page.

Both figures are shown the same height in the illustrations below in order to make direct comparisons. Normally the woman is drawn slightly shorter than the man beside her. To do this, using the eight-head formula, you should construct her with a smaller basic head measurement than that of the man.



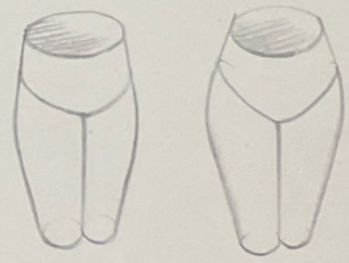
Study the diagrams above, comparing the male and female form point by point. Notice that the man's shoulders are fully three heads wide; the woman's are much narrower. On the other hand, the man's hips are much narrower than his shoulders, while the woman's are about the same width as her own shoulders. The woman's shoulders also taper much more than the man's. The basic form of the woman's thigh is thicker, throughout its whole length, than the man's thigh. Her arms, wrists, and fingers are smaller and thinner than the man's, and her lower legs taper to thinner ankles and smaller feet. The female breasts are two simple half-spheres, the bottom line of which is about one-third of the way down from the top of the shoulder to the crotch. The male nipples are placed about two head-lengths from the top of his head. The female nipples are slightly lower.

Male Female

This diagram compares the hip structure in man and woman. The female hips, on the right, are obviously much broader than the male hips at the left. The upper thigh is clearly much thicker in the woman. The

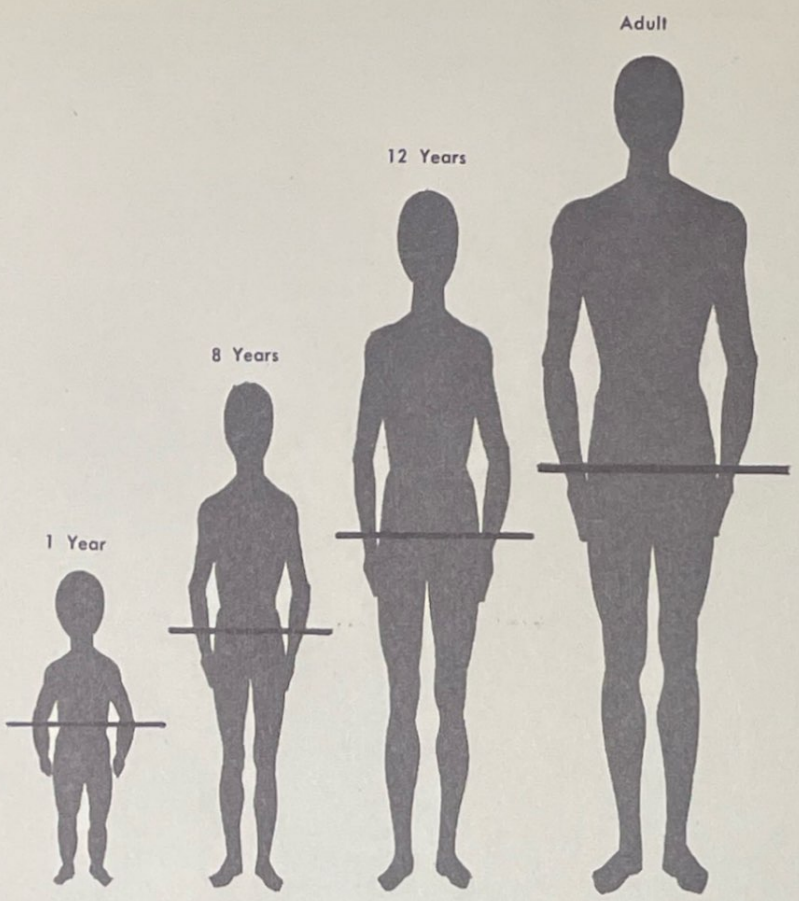
Male Female

woman's leg is also set on the pelvis at a sharper angle, which results in a beveled plane which is much larger than in the case of the man. Notice also that



Male Female

the woman has a narrower waist than the man, and the angle from the waist to the widest point of the hips is therefore much sharper in the woman's figure.



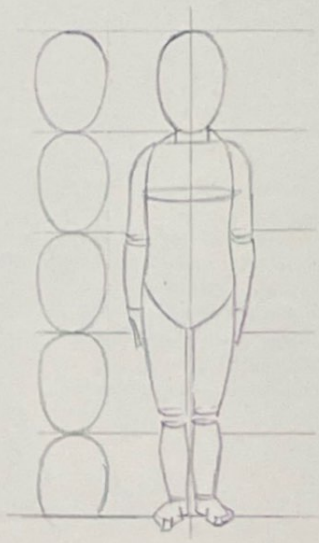
This diagram is intended to show you the relative height of children at various ages, as compared with the adult figure. The horizontal line is drawn to indicate the *center* of the figure. Notice how the center line moves down from a position on the lower chest of the one-year-old, until it reaches the crotch when the figure is fully developed. Notice also that the legs and arms grow much more than any other part of the body, while the head size changes quite slowly.

Relative proportions at various ages

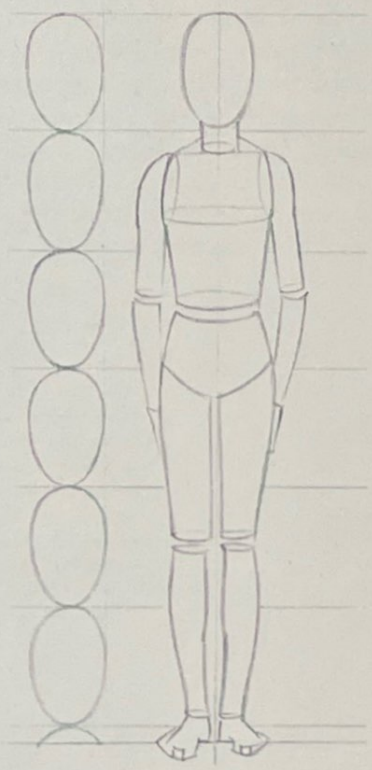
When a child is born, some parts of its body are much further developed than others. Its head, for example, is quite large as compared with the length of its arms and legs. By the time the baby is a year old, his body from neck to feet is about three and one-half times the length of *his own head*. In other words, he is about four and one-half heads high. His legs are still quite short compared to the length of his head and torso; therefore the center of his body is at a line through the stomach, rather than at the crotch.

As the child grows older his legs and arms become much longer. By the time he is eight, the center of his body has moved down to a line above the hips. At the age of twelve, he is about seven heads high, and the center of his body falls at the crotch. From this time on, until he becomes a full grown adult, he broadens out in addition to becoming taller.

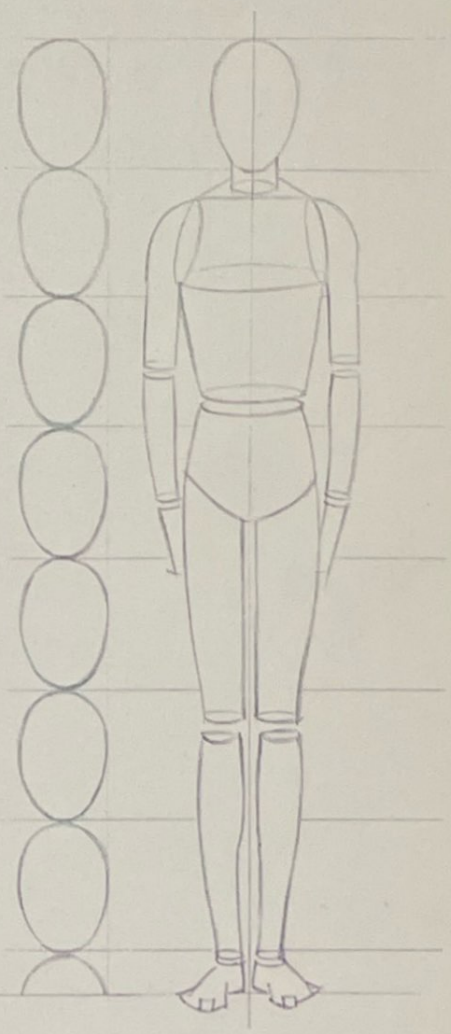
The proportions given here are for the "ideal" child. Actually, of course, it is very difficult to be specific about the proportions of a child at a particular age. Some children grow much more rapidly than others, and girls tend to develop faster than boys. In practice, the infant is often made chubbier than he might be in real life, and the child of ten or twelve is sometimes given a mature grace. Despite individual variations, the proportions shown here are satisfactory for most purposes.



The one-year-old must be measured in terms of *his own head*, of course. Using this head size as a measuring unit, he is about four and one-half heads high. Study the points at which the head measurements fall on the various parts of the body.



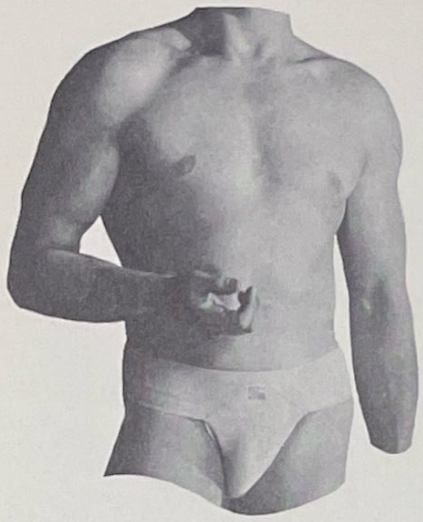
By the time the child is eight years old, the head has grown somewhat larger. Measurements must again be made in terms of the *new* head size. The eight-year-old can then be considered six and one-quarter heads high. Always remember that there is no *absolute* head measurement; each figure must be measured in terms of its *own* head size.



The head of a child twelve years old has again grown, and we measure the new figure in terms of the new head size. The usual twelve-year-old is about seven heads high. The center of the figure is now at the crotch. From this time on, all the parts of the body will develop at about the same rate, until the figure reaches its full development at about the age of twenty-five.

Human form

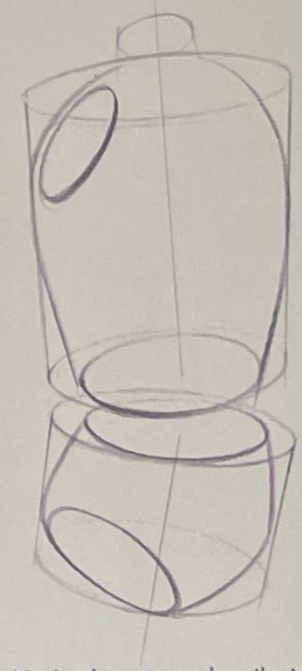
Construction



1 As we have seen in our analysis of the basic form figure, the human torso is essentially two forms joined together on a flexible spine which permits movement in all directions. The upper form is approximately twice as high as the lower.

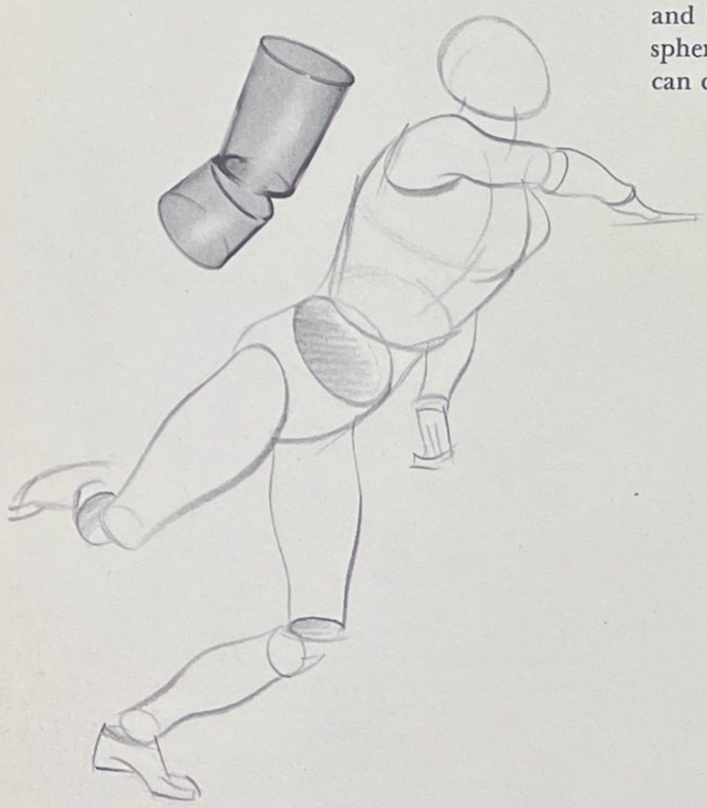
2 In order to visualize the relationship of these two forms, get two ordinary tumblers, one twice as high as the other. Like these two glasses, the two forms of the human torso are essentially simple *cylinders*.

3 This is the way we would draw these two simple glass cylinders. If you think of the actual glasses before you as the upper and lower portions of the torso, and draw the glasses through in three dimensions, you will have no trouble visualizing the torso itself.

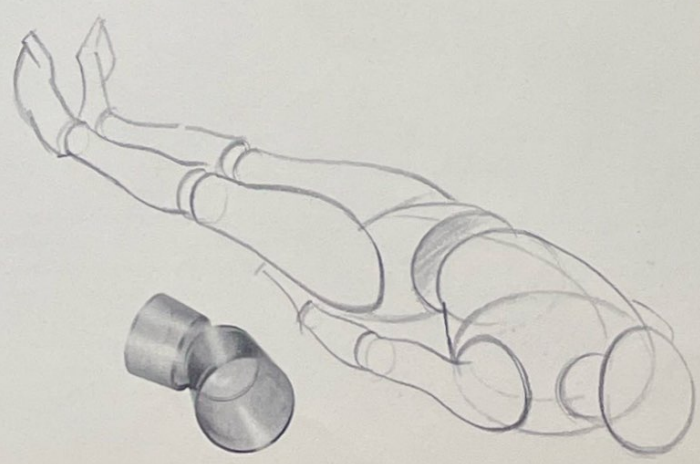


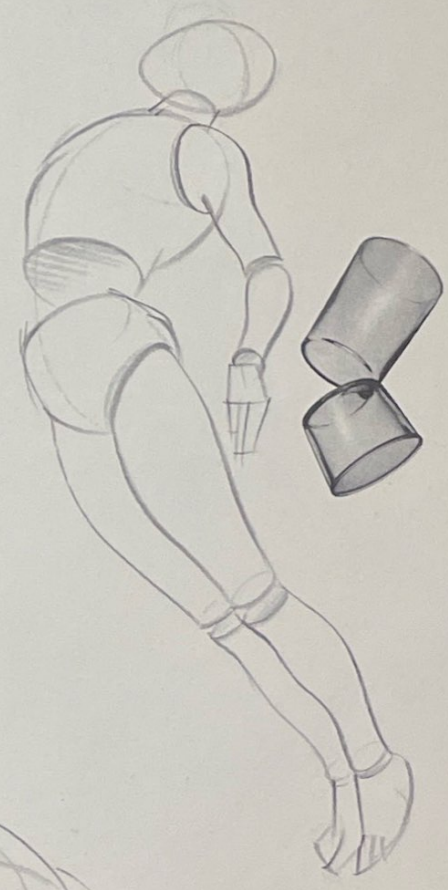
4 In this drawing you see how the two parts of the torso fit inside the two glasses. The torso forms look convincingly three-dimensional because they occupy the volume of space you have created by drawing the glass cylinders through to the other side.

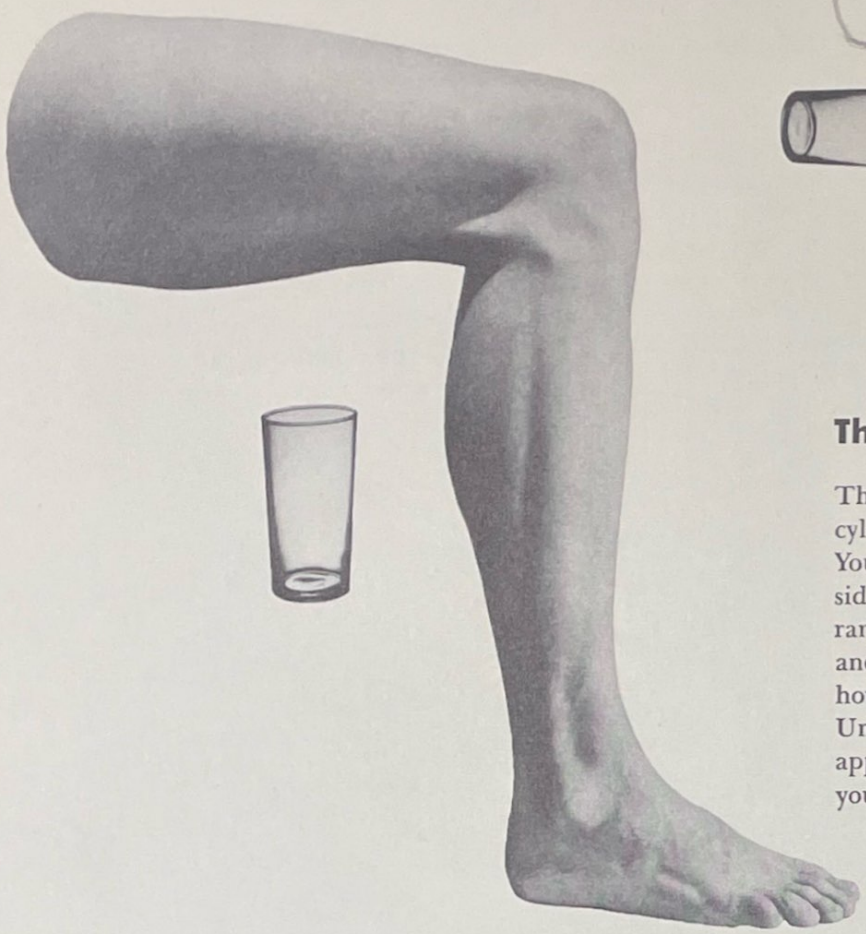
Earlier in the course we explained how helpful it is to reduce *all* objects to their simple basic forms of cube, cone, sphere, or cylinder. This can be done very easily even when the object seems quite complicated. On these pages we will demonstrate how to think of the torso, arms, and legs as modified cylinders, the hands and feet as cubic shapes, and the head as a simple sphere. If you can draw the simple basic forms you can draw the human body.

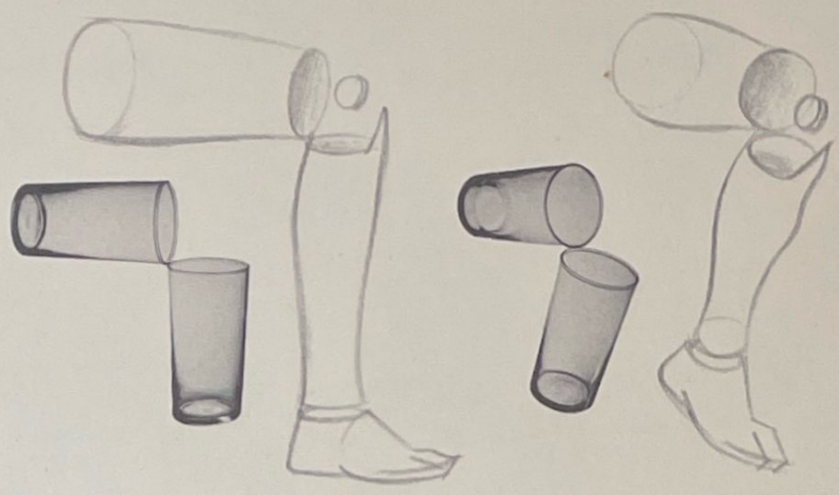


Think of the two parts of the torso as fitting inside the glasses. By changing the relationship of the glasses, you can then imagine the torso in any position. Draw through the glass ellipses to create a three-dimensional volume of space, and then draw the solid torso through *inside this space*. If you follow this procedure you will find it easy to visualize and draw the torso even in twisting or foreshortened poses.



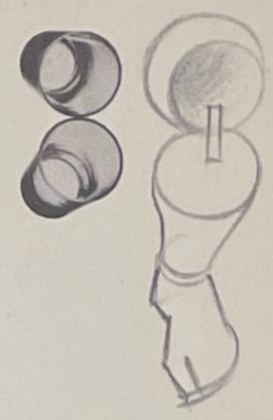


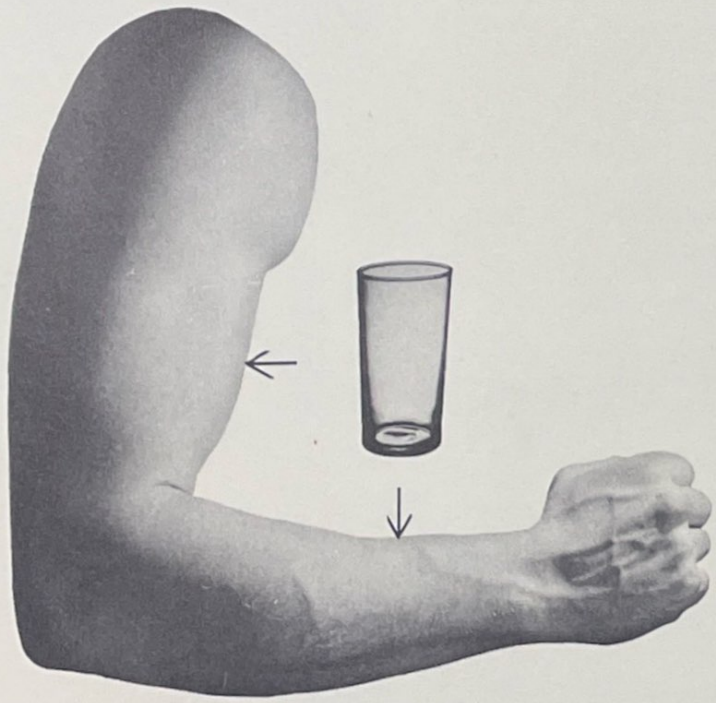




The leg

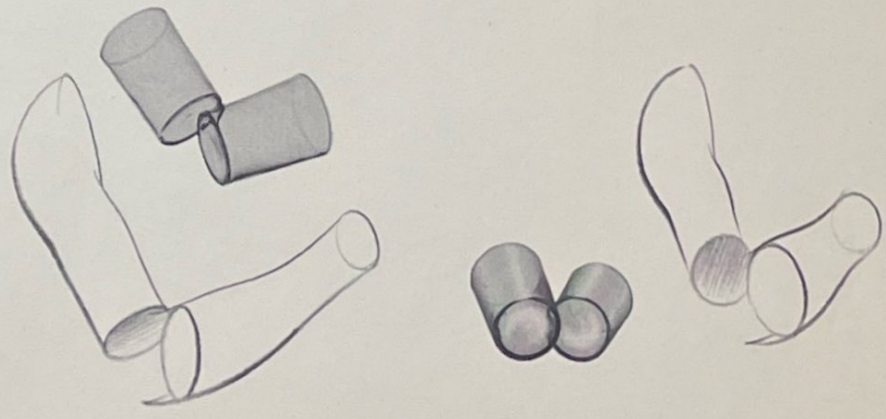
The upper and the lower leg are both modified cylindrical forms of approximately equal length. You can visualize these two forms very easily inside the cylinders of the drinking glasses. By arranging the two tumblers in different positions and studying the ellipses in the glass you will see how the ellipses of the leg forms should look. Until you are completely sure of yourself, this approach will be of great help, especially when you are drawing the leg in foreshortened poses.

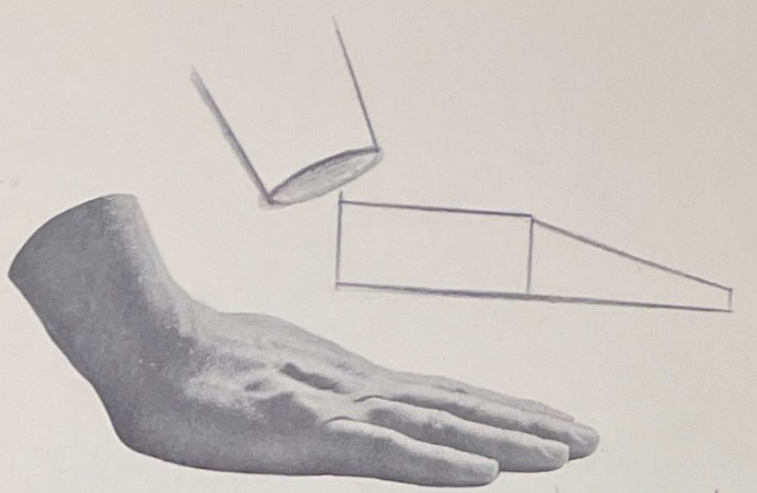




The arm

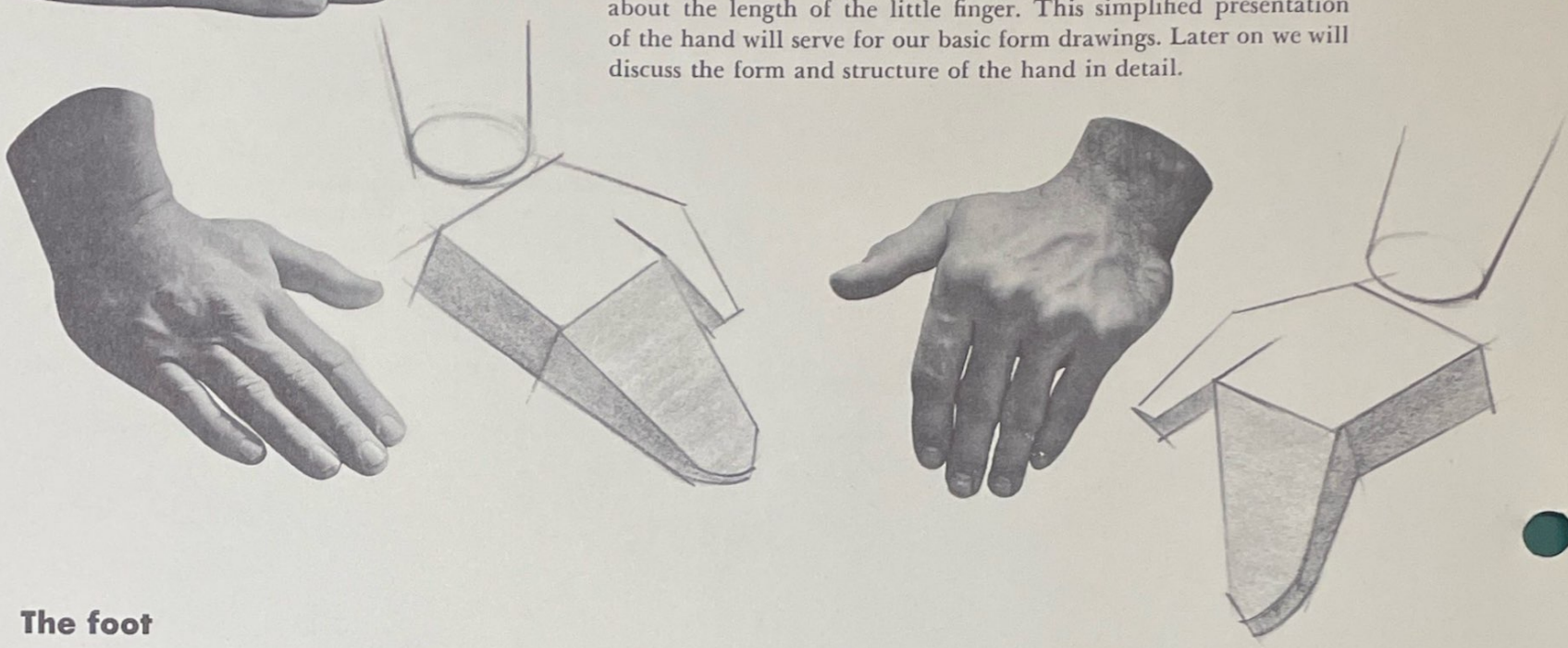
The upper and the lower arm are both modified cylinders very similar to the upper and lower leg. The chief difference is that the arm and leg are hinged so that they bend in opposite directions. The cylinders in which the arms and legs are constructed are much narrower and longer than the cylinders which enclose the two forms of the torso, but otherwise they are much like the torso cylinders. You will find it very helpful to use drinking glasses in visualizing and drawing all these forms.





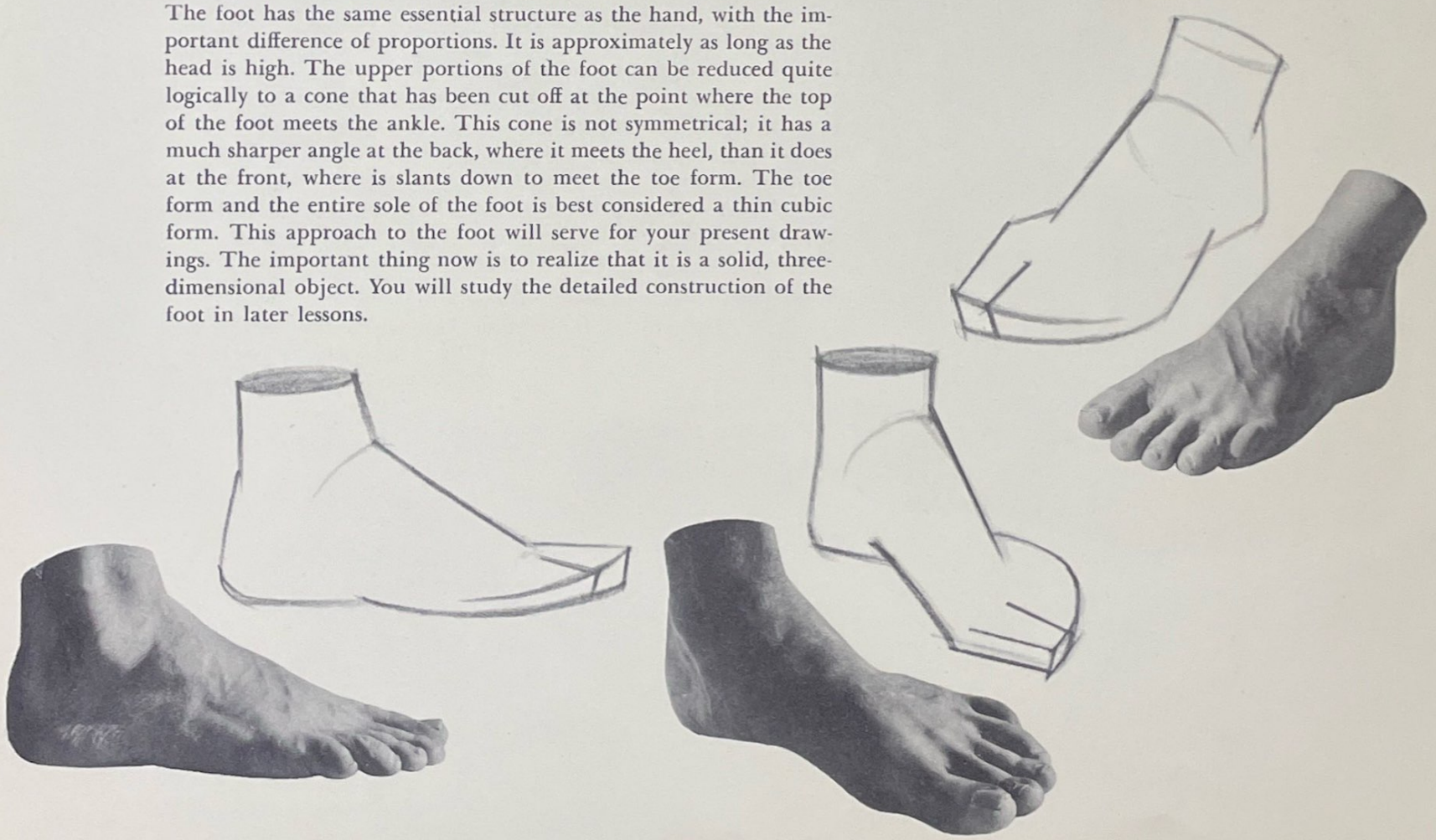
The hand

The hand, like the foot, cannot be reduced to a single basic form quite as easily as can the other parts of the body. However, it may be interpreted for the present as a combination of simple forms which represents the real hand with reasonable accuracy. At the left it is treated as a wedge-shaped cube divided into two sections. The upper, broad section of the cube symbolizes the palm; the lower, tapering wedge suggests the mass of the fingers. The wedge of the palm, viewed alone, is a nearly perfect square. The finger wedge is about as long as the palm wedge. The visible part of the thumb is about the length of the little finger. This simplified presentation of the hand will serve for our basic form drawings. Later on we will discuss the form and structure of the hand in detail.



The foot

The foot has the same essential structure as the hand, with the important difference of proportions. It is approximately as long as the head is high. The upper portions of the foot can be reduced quite logically to a cone that has been cut off at the point where the top of the foot meets the ankle. This cone is not symmetrical; it has a much sharper angle at the back, where it meets the heel, than it does at the front, where is slants down to meet the toe form. The toe form and the entire sole of the foot is best considered a thin cubic form. This approach to the foot will serve for your present drawings. The important thing now is to realize that it is a solid, three-dimensional object. You will study the detailed construction of the foot in later lessons.

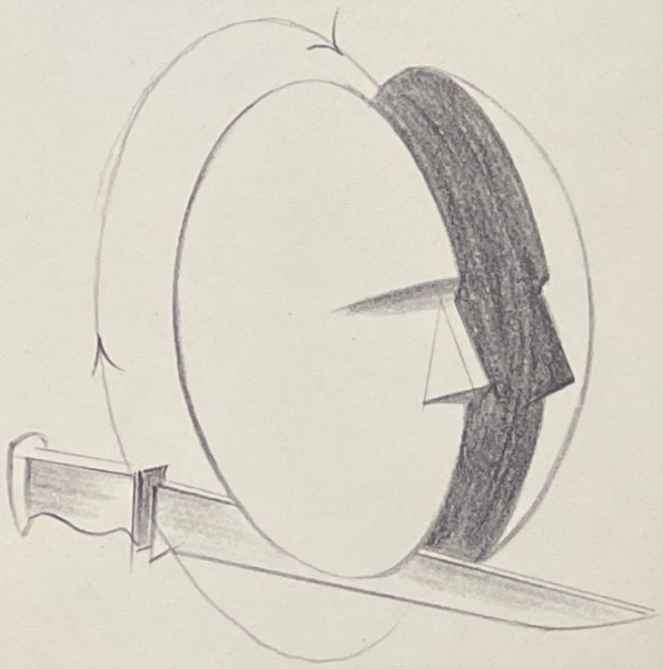


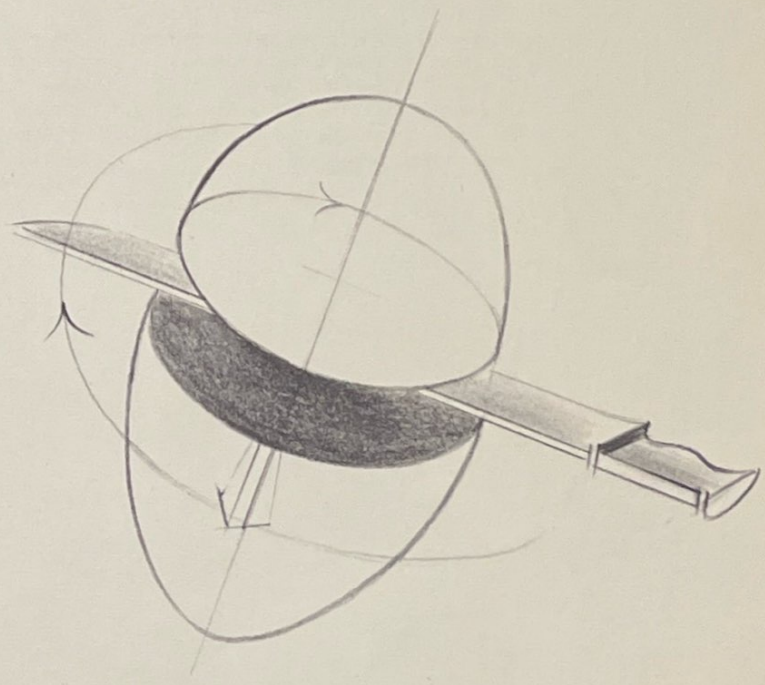
The head

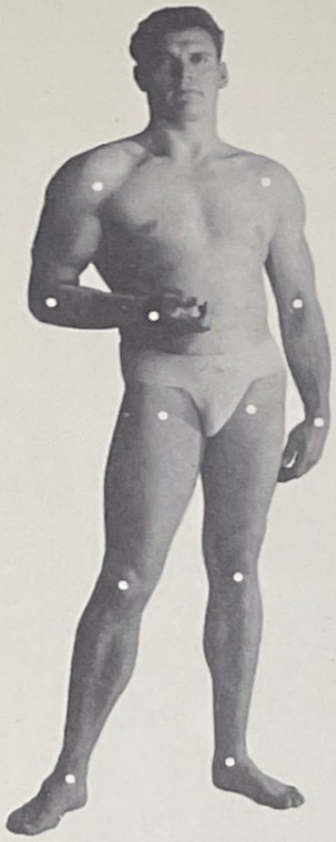
Of all the individual parts of the human body, the head is undoubtedly the most important from the viewpoint of the artist. In later lessons we will make an exhaustive study of the placement and formation of the features, the handling of the hair, and so on. For the present, however, it is extremely important for you to *ignore* these details and think of the head only in terms of its essential solidity and mass.

The basic head is a *spherical* form, like an egg, set on the cylindrical column of the neck. The nose and ears are not part of the basic egg form; they are wedges which project from the surface. If you sliced down through the egg-head on the vertical axis, the knife would pass through the center of the nose wedge, and the egg would fall apart into two equal halves. If you were to slice the egg on the horizontal axis, with the knife passing through where the top of the nose wedge meets the egg, you would again find that you had sliced the egg in half.

This demonstration is intended to remind you that *the human head is a solid form.* In your basic form drawings, think of the head as a solid sphere, and draw it as such, without attempting to work out details of the features.







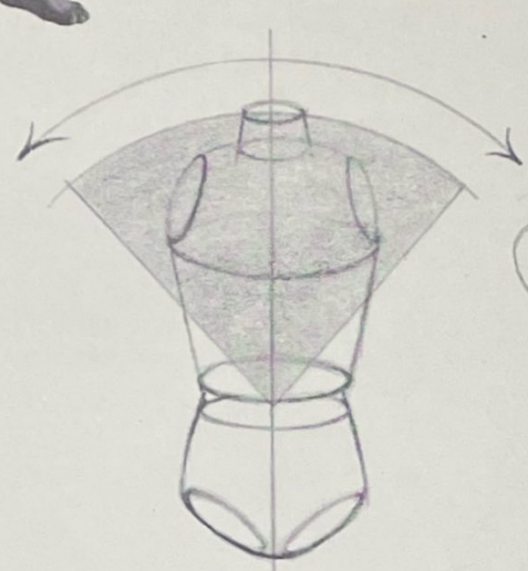
Movable parts

Important points at which motion occurs in the body are indicated by white dots on the figure at the left. The individual parts are connected by three distinctly different types of joints: 1) the *ball-and-socket* joint, which appears at the shoulders, hips, wrists, and ankles; 2) the *hinge* joint, found at the knees and elbows; and 3) the *flexible column,* a term used to describe the spine and the neck.

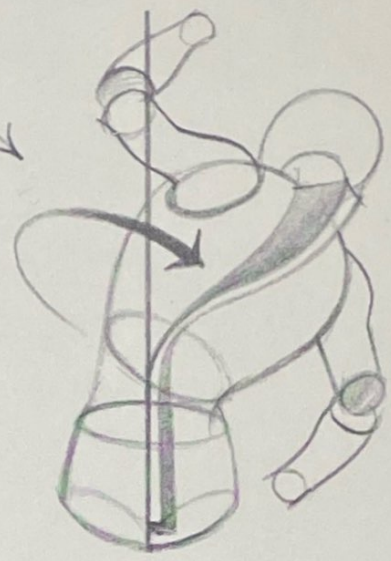
Each of these joints varies considerably in the type of motion it allows. The ball-and-socket joint is extremely flexible and permits rotary motion in all directions, although the *amount* of motion depends on the construction of the individual joint. The hinge joint at the elbows and knees may be visualized as a flat disk. This disk provides the flexibility-plus-rigidity which these members need to act as adaptable levers. The upper and lower arms and legs can be fixed in any relationship on a straight line, but all sideward motion is prohibited. The action of these two joints is illustrated on the opposite page.

The third type of joint is the flexible column of the spine. This connects the upper and lower halves of the body. The spine is involved in any motion which requires shifts in weight, such as walking, running, and jumping. Since it is highly flexible, it permits not only rotary motion in all directions, but also twisting motion throughout its entire length. The upper part of the spine is the neck, which controls all motion of the head.

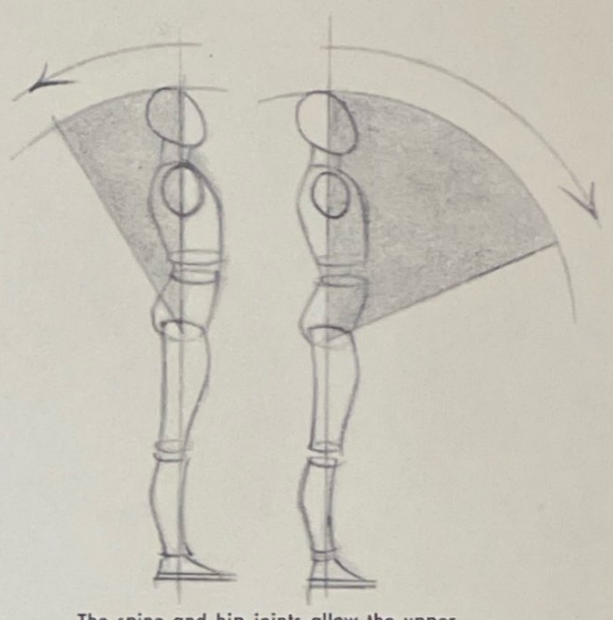
The diagrams on this page are intended to remind you of the various possibilities which these three different joints provide. However, you can study the possibilities and limitations of motion in the human body best by experimenting to see how the various portions of your *own* body move. *Test out these diagrams for yourself.*



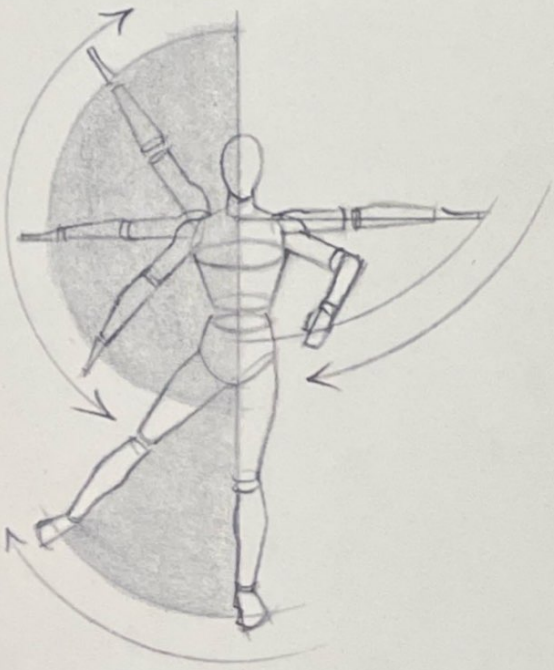
The flexible column of the spine connects the upper and lower halves of the body. Because of the way it is designed, it permits more motion in some directions than in others. These are the approximate limits of motion from side to side.



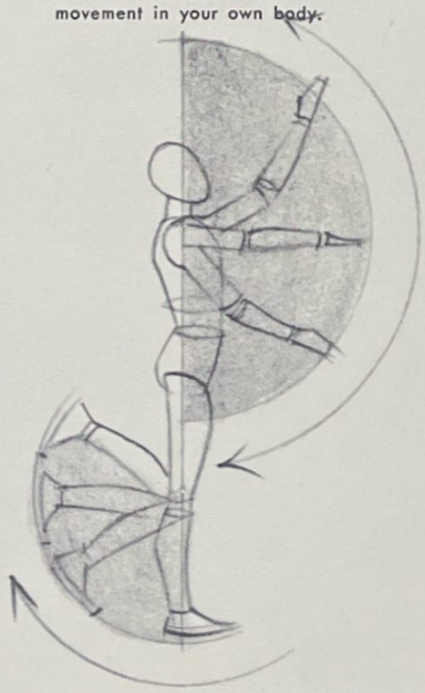
The twisting motion between the upper and the lower torso is extremely important in almost every action pose. We will consider the construction and movement of the spine thoroughly in later lessons, but you should study it for yourself now by noticing the limitations of this movement in your own body.



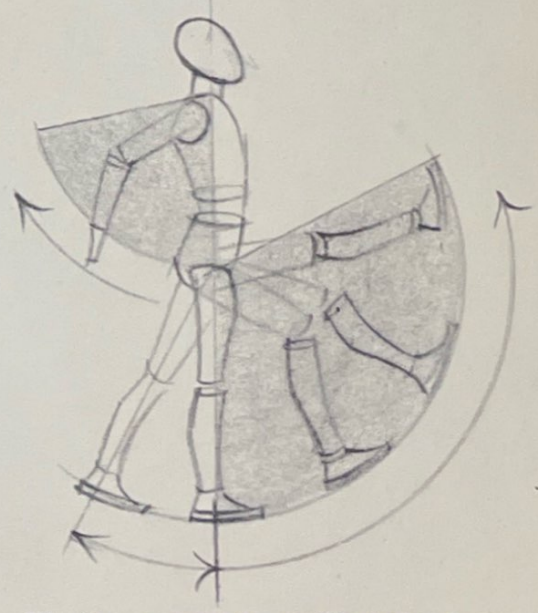
The spine and hip joints allow the upper part of the body to bend forward until it is practically at right angles to the lower part. The backward motion is more limited, however. The spine is in effect a rotary type of joint; it permits somewhat the same movement as if the upper torso were mounted by a ball-and-socket joint on the lower torso.



The shoulder and the hip joints are both ball-and-socket rotary joints, but because of construction the shoulder joint is much more flexible than the hip joint. Motion of the shoulder joint covers a complete arc, as you can see, but motion of the hip joint is much more limited.



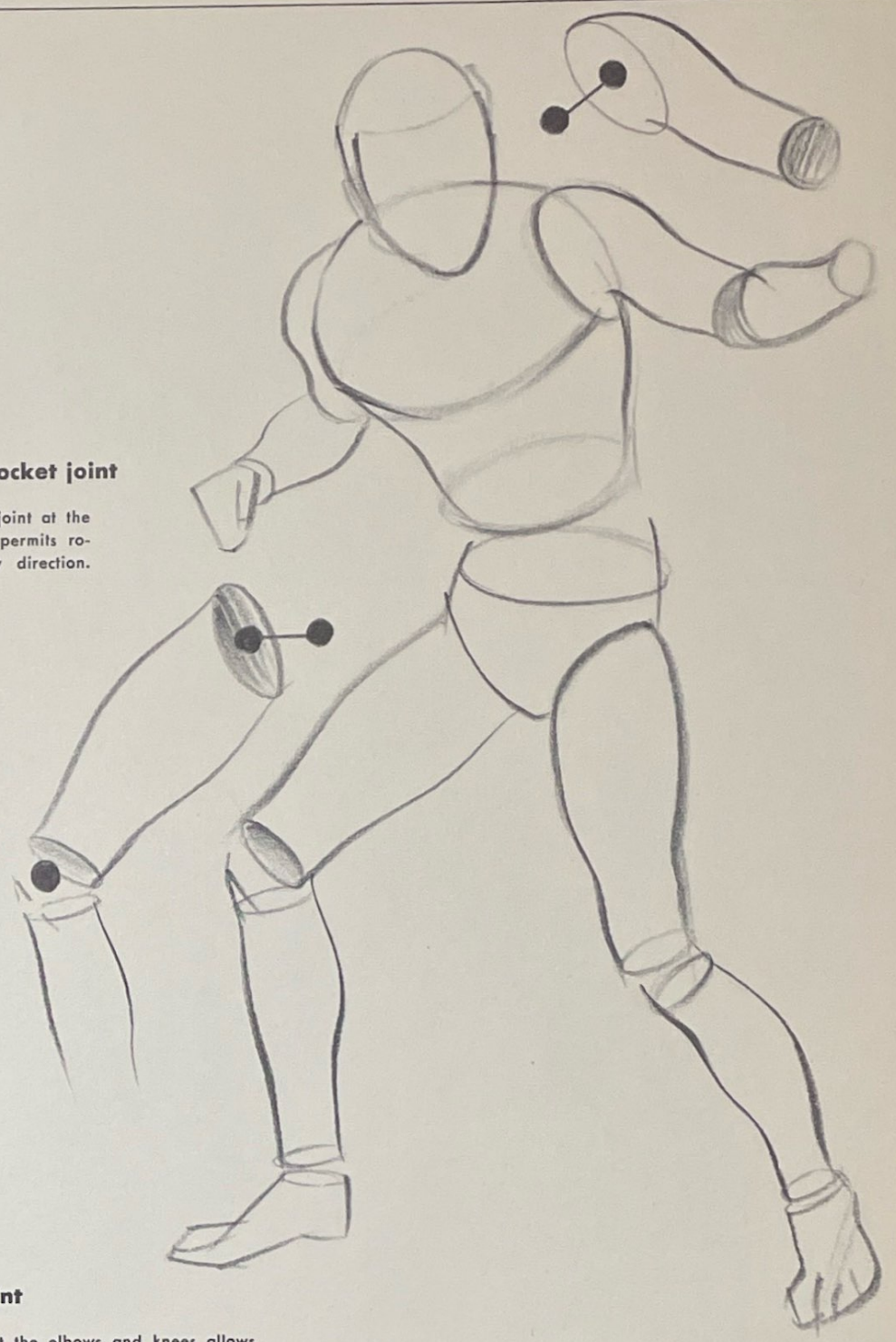
The sense of balance in the human body is so well developed that when one part reaches out from the central axis, another part instinctively tends to extend itself to create a new state of equilibrium. If the arm, for example, reaches up, the lower leg will probably be lifted back to balance it.



This diagram shows the possible backward movement of the arm and the forward movement of the leg. It again demonstrates the tendency of the body to seek a state of balance. These two motions are naturally associated, as are the two motions shown in the previous example. If your figure poses are to look natural, you must take into consideration this matter of *reciprocal balance.*

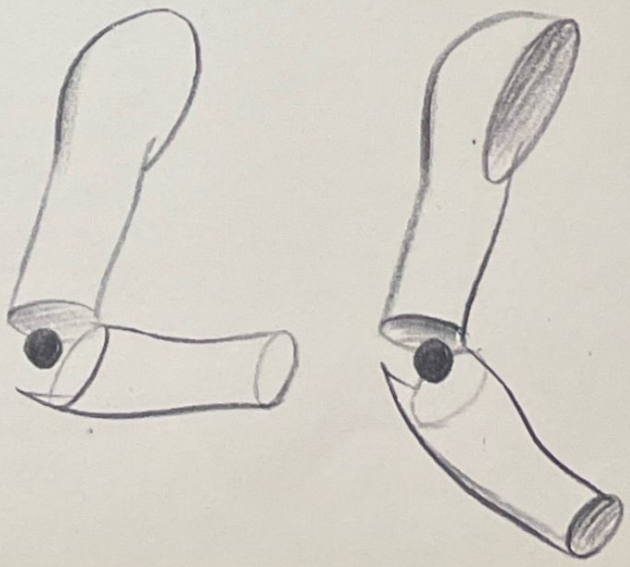
The ball-and-socket joint

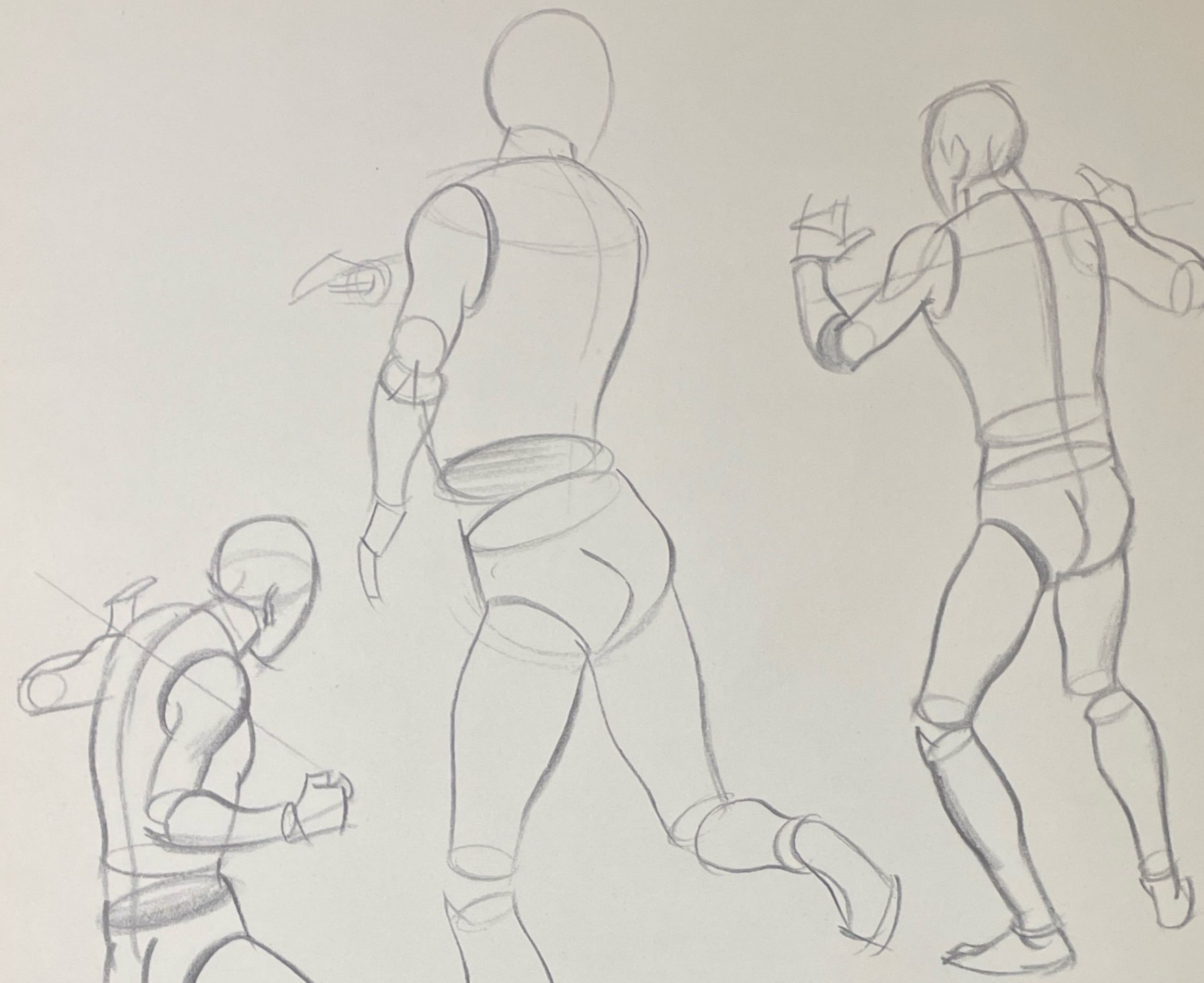
The ball-and-socket joint at the shoulders and hips permits rotary motion in any direction.



The hinge joint

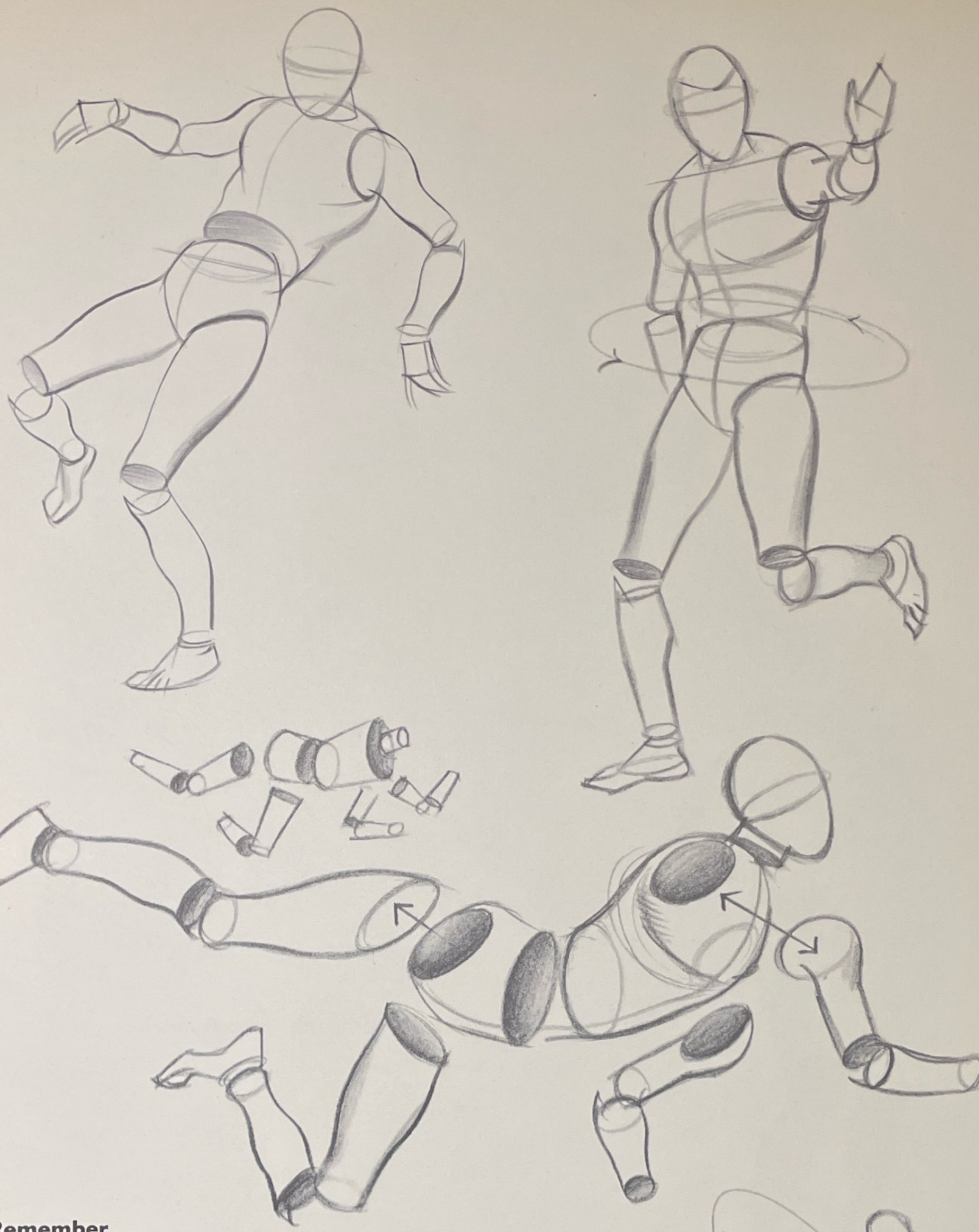
The hinge joint at the elbows and knees allows motion in a straight line, but not from side to side. The hinge joint at the elbow allows the upper and the lower arm forms to bend *forward* toward each other; backward motion is arrested by a stop on the under side of the lower arm. The hinge joint at the knee enables the upper and lower leg forms to bend *backward* toward each other; forward motion is stopped by the kneecap.





Practical uses

Although the material on the foregoing pages has been presented in a factual, impersonal way, as though we were analyzing the construction of a dressmaker's dummy, our ultimate object is to create *real, breathing, living people.* If you have learned to think of the basic form in simple three-dimensional cylinders, cubes, and spheres, you are now ready to take the much more exciting step of composing this form figure in action patterns. The drawings shown on these two pages are done in exactly the manner you have been studying, and very little attempt has been made even to suggest anatomical detail. But any of these figures could be developed directly into a finished figure drawing. The *proportions* and *construction* are correct, and the various elements are properly balanced. These figures have convincing mass and weight because each part has been *drawn through* in three dimensions.



Remember

Remember to visualize the various parts of the form figure in terms of the basic simple forms of cylinder, cube, and sphere. Remember to use ordinary glasses to help you see how the ellipses look in the simple cylinders of the upper and lower torso, the upper and lower arms, and the upper and lower legs. Remember to think of the head as a simple sphere. Remember the law of balance and equilibrium. *Remember to draw all these forms through to the other side.* If you follow these principles, you will find it very easy to develop convincing drawings of the human figure in action.

Seven artists draw the same figure

Each drawing on these pages was made by a different artist working from the same figure. Two important points should be gained from your study of these drawings and applied to your own work:

1. Each artist has drawn the figure in his own personal way. He has used a style that is easy and natural for him.

2. *Most important of all* — each drawing clearly shows that the artist has *thought* of the figure and *drawn* it as though it were made up of solid three-dimensional forms.

Because the feeling for form has now become a habit with these artists, they no longer find it necessary to draw the arms, legs, torso, etc., as separate cylinders. Nevertheless their drawings clearly show they always *think* of them in these terms.

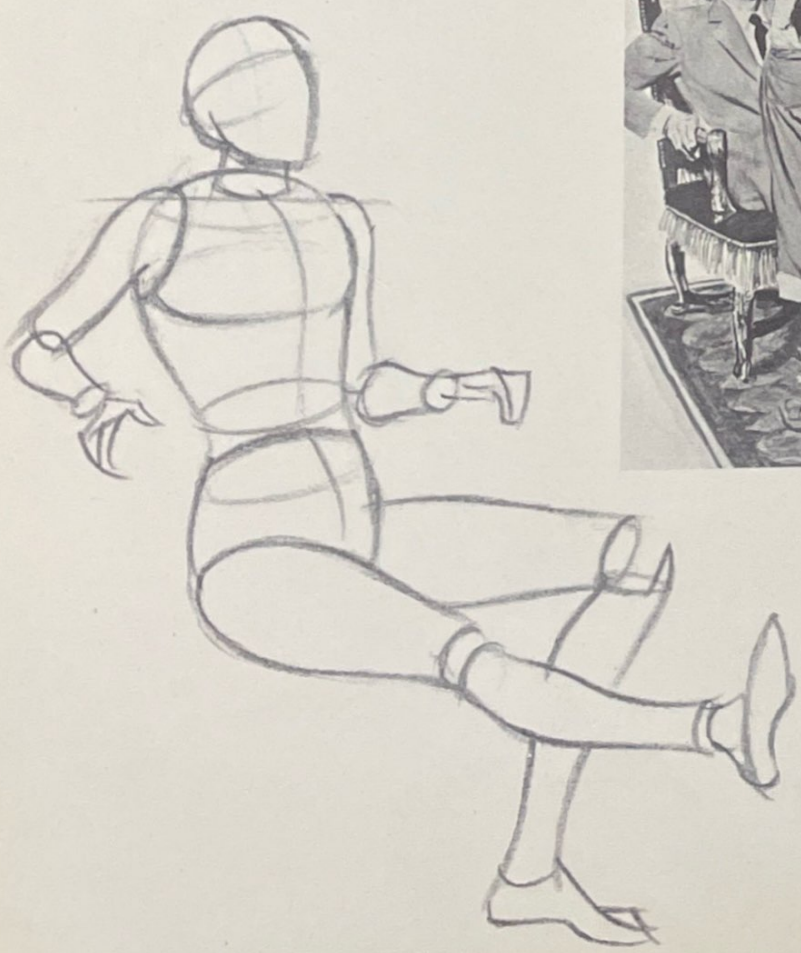
To make solid convincing figure drawings, you *must* concentrate on learning the basic forms of the figure which we have carefully analyzed earlier in the lesson. At this stage of your training you will benefit most by making drawings which are generally similar to those on the two preceding pages. As you gain more and more experience drawing these simple solid forms, *you* will naturally and unconsciously develop your *own* style.

HAROLD
VON
SCHMIDT

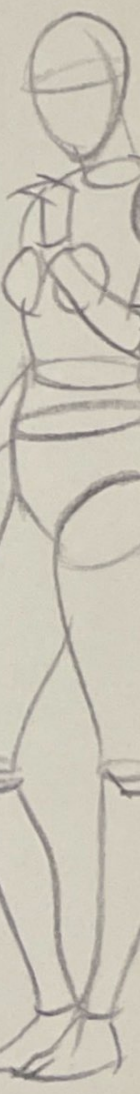
m. mitchell

ALBERT
DORNE

The more "real" your figures look, the more solid and three-dimensional must be the basic form underlying details of anatomy and clothing. In the paintings of Norman Rockwell the figures are so convincing that we feel we are looking at a scene from real life. The artist could never achieve this effect simply by copying down the exterior appearance of people or things. His thorough knowledge of construction enables him to build his figures three-dimensionally, with each detail assigned its proper place and given precisely the right emphasis. The drawings above show the basic forms which underlie the finished rendering.

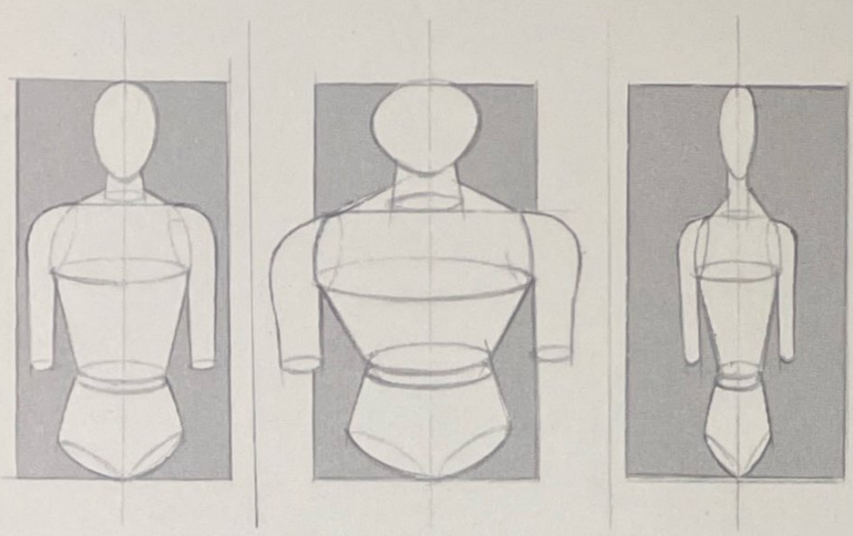


Al Parker is noted for the economy and design of his pictures. Although he often works in patterns, and organizes both figures and props into deceptively simple compositional areas, he always makes sure that the basic form underlying his figures is sound and convincing. The drawings show you the solid structural form from which each of the figures has been developed.

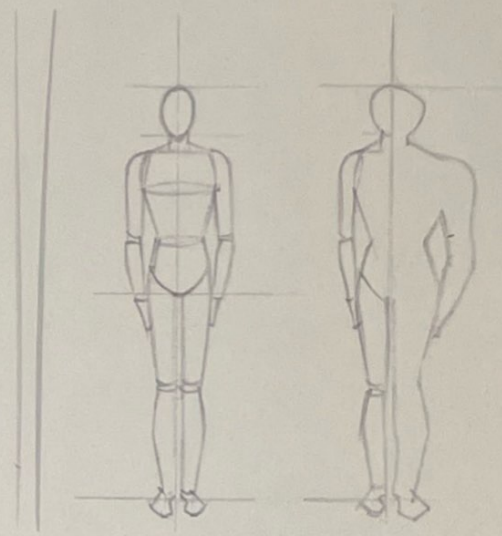


Do's and don'ts

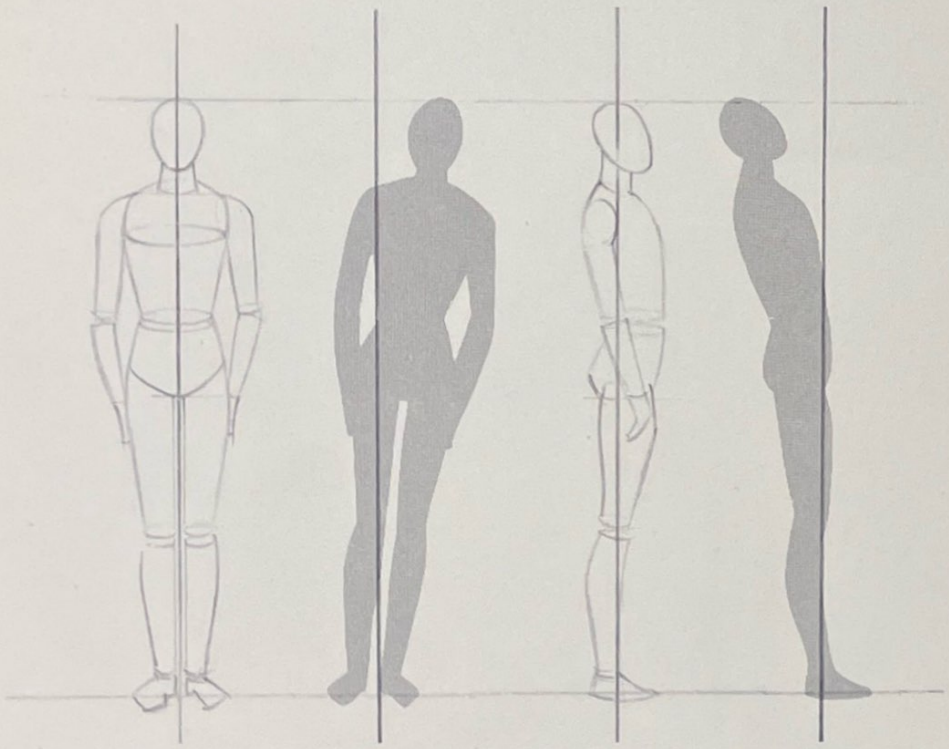
No matter how careful you are in drawing the form figure, you will sometimes find that you have made mistakes in construction or proportions without realizing it. The drawings in this section show you the most common errors. Keep these pitfalls in mind while making your drawings, and check your finished work against these pages from time to time; you may discover mistakes you had overlooked.



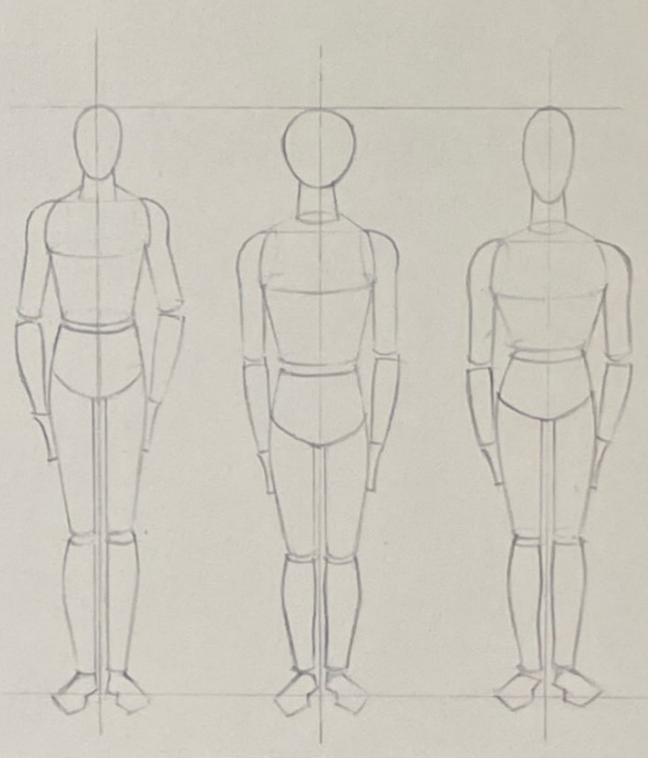
Don't get in the habit of making your figures too *broad* or too *narrow*. Remember that the head form you are using as a measuring unit must be correct in its proportions of height and width. If you use too broad or too narrow a head, as in the two drawings at the right, above, the resulting figure will probably be too broad or too narrow also. Remember particularly that the three-head-measurement for the upper body includes the shoulders, and is not the measurement for the upper torso alone.



The two sides of your figure should be alike in *width* as well as in height. Make sure that you avoid the lopsided effect seen above. It is easy to check this in straight front or rear views; it is more difficult if the figure is drawn in a three-quarter view where foreshortening may be involved. Be careful to avoid this kind of distortion.



Always remember that *balance* is extremely important in depicting the figure. If you are drawing a vertical figure, like those above, establish a vertical axis and balance the figure on that axis. If the figure is drawn *off balance*, it must be supported against some other object, like a wall or a table, or it will topple over.



The two drawings at the right demonstrate what happens when the proportions of the individual parts of the body are incorrect. Notice the wrong head shapes, the long necks, the proportions of torso as compared with arms and legs. It is quite true that people in real life do not always follow the ideal proportions of the eight-head figure at the left; but remember that you are drawing *ideal* form figures now, and not attempting to make realistic copies of real-life models.

Human form

Photo Durand-Ruel

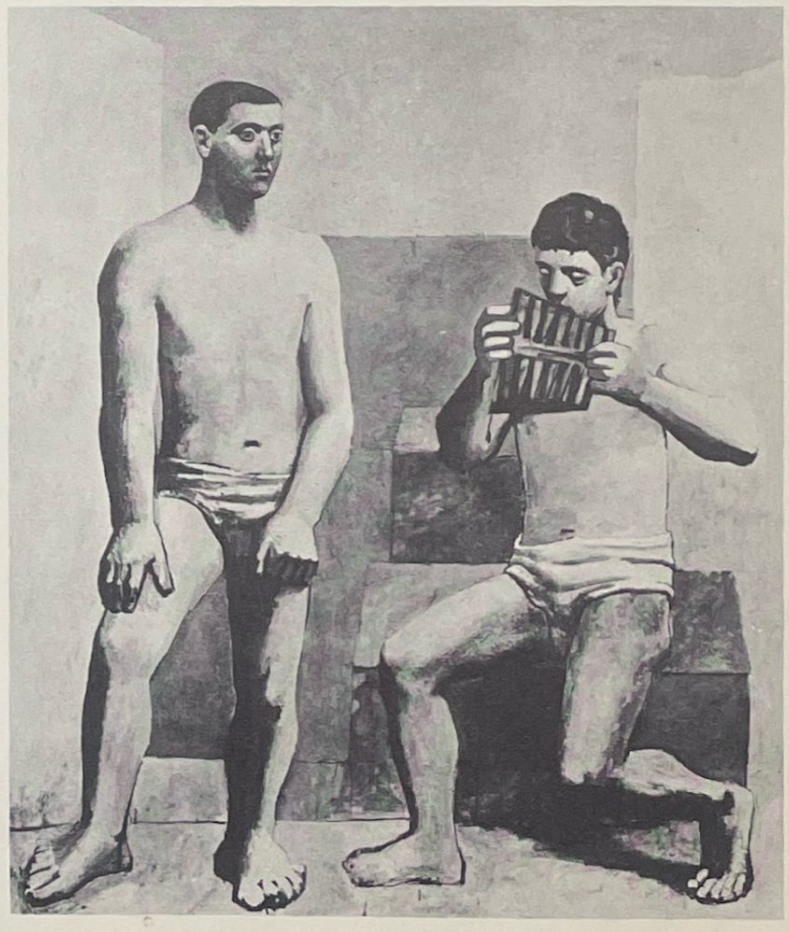
DEGAS. The Toilet

The form of the body is presented with complete naturalism. The pose seems casual; the texture and quality of flesh and hair are carefully observed. Yet at the same time the forms are arranged in a masterful pattern of interlocking convex curves and contrasting angular shapes. The areas surrounding the figure repeat these designs. Only a very knowing artist can create such a complex organization while keeping it completely unobtrusive.

PICASSO. The Pipes of Pan

This painting might have been entitled "Composition of Masculine Forms," so thoroughly virile is the design in every way. The figures are generalized and modeled strongly to give the form maximum conviction. Rectangular forms and squared-off planes provide support for the figures, establish depth, and serve as contrast with the rounded forms.

The Museum of Modern Art (Lent by the artist)



Collection of the artist

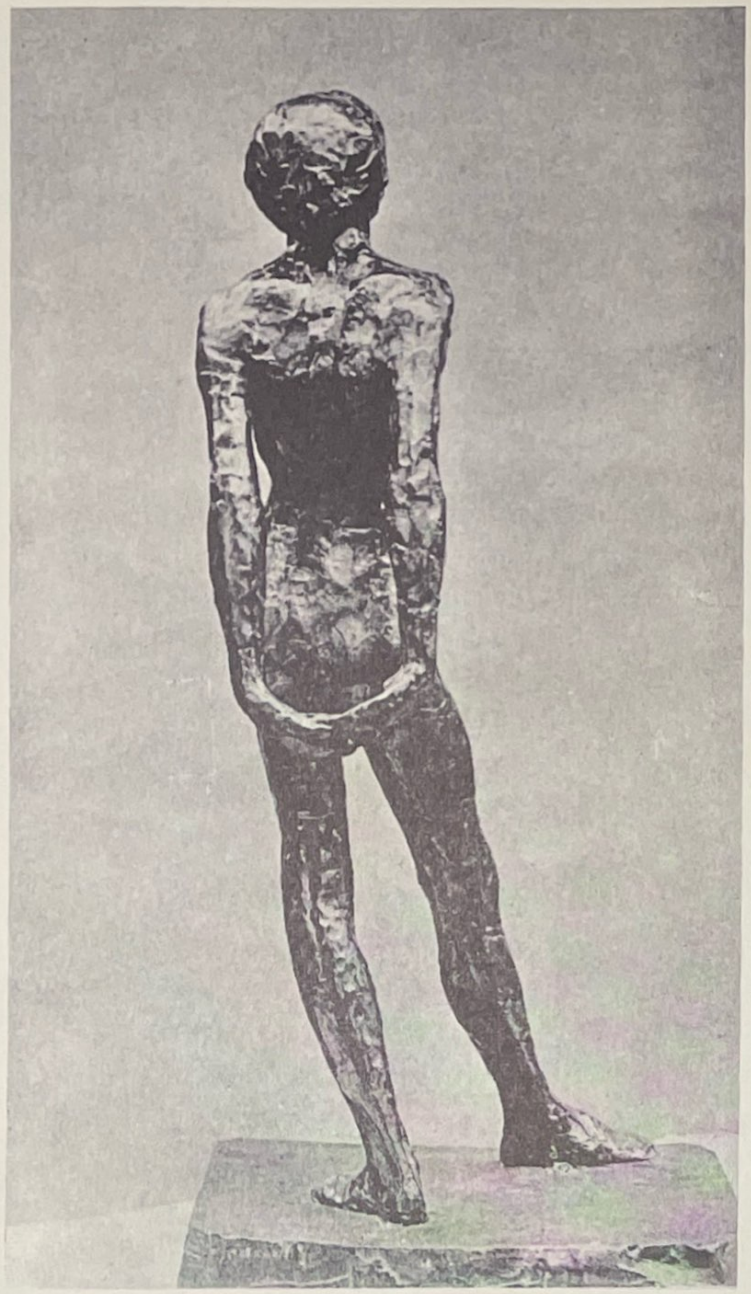
JERRY FARNSWORTH. Trapeze Artist

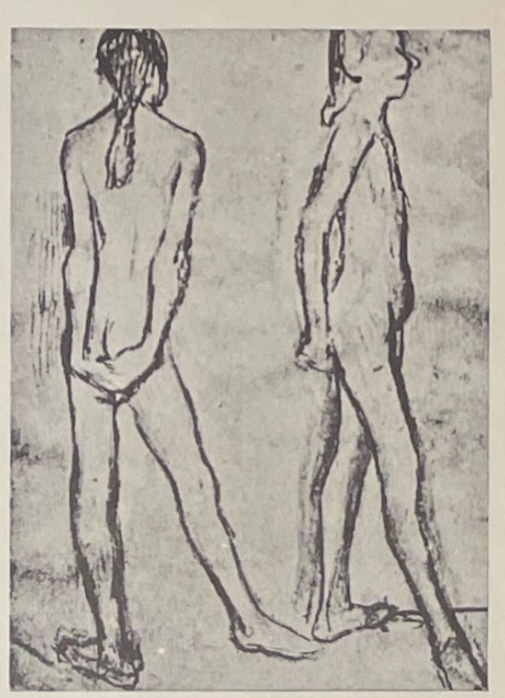
In this realistic handling of the figure the entire body has been presented as if this were a three-quarter length portrait. The hand, legs, and torso are studied as carefully as the head. Since the model was a circus performer of some note, it was logical to treat the subject in this way. The soft forms of the body are emphasized by contrast with the flat planes and straight lines in the background.

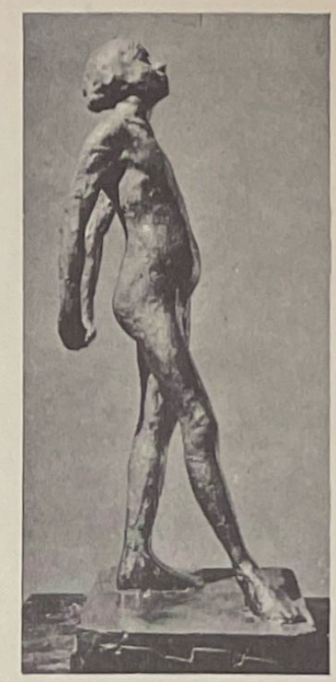
Courtesy of the Metropolitan Museum of Art

EDOUARD MANET. Torero Saluting

Beneath the colorful costume of this torero is a soundly constructed figure whose proportions and construction coincide closely with the basic form figure you have studied throughout this lesson.







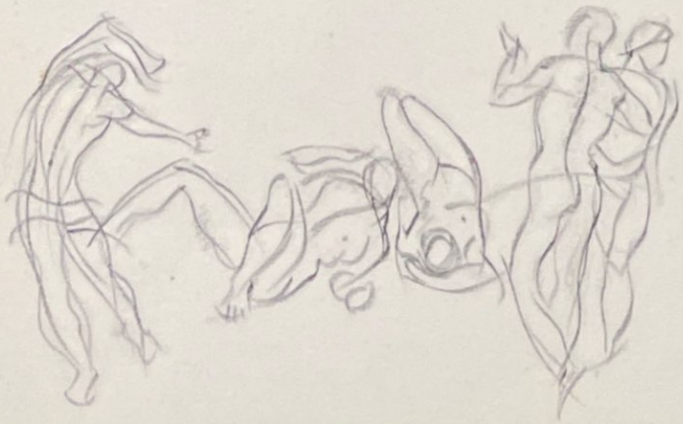
DEGAS. Nude

An artist who paints in three dimensions thinks of the figure as a solid occupying space behind the picture surface. He relates forms in depth as carefully as he composes them across the surface of the painting. Degas sketched the figure from several different views when preparing to present it in sculpture. To make sure he fully understood the form, he sometimes studied the figure in sculpture before painting it.

BEN STAHL. Sketches

In these sketches Stahl attempted to capture, as he said, something of the "distinctive animal allure" characteristic of these two quite different models. Notice how sensitively the lines and edges are controlled to delimit the form, and still suggest the sensuousness of the texture.

EL GRECO
The Laocoon
National Gallery of Art, Washington, D.C.
Samuel H. Kress Collection



The famous mythological subject — Laocoon and his sons being destroyed by two snakes — afforded El Greco a magnificent opportunity to portray the human figure in action. The motif of the snakes suggested a compositional pattern of tense, sinuous curves. The small, Chinese-looking diagram is a simplification of these figures in terms of over-all gesture. The other diagram shows how these gestures were captured in the final arrangement.

Lesson **6** Famous Artists Painting Course

Human form

Courtesy, Museum of Fine Arts, Boston

MATISSE. Carmelina

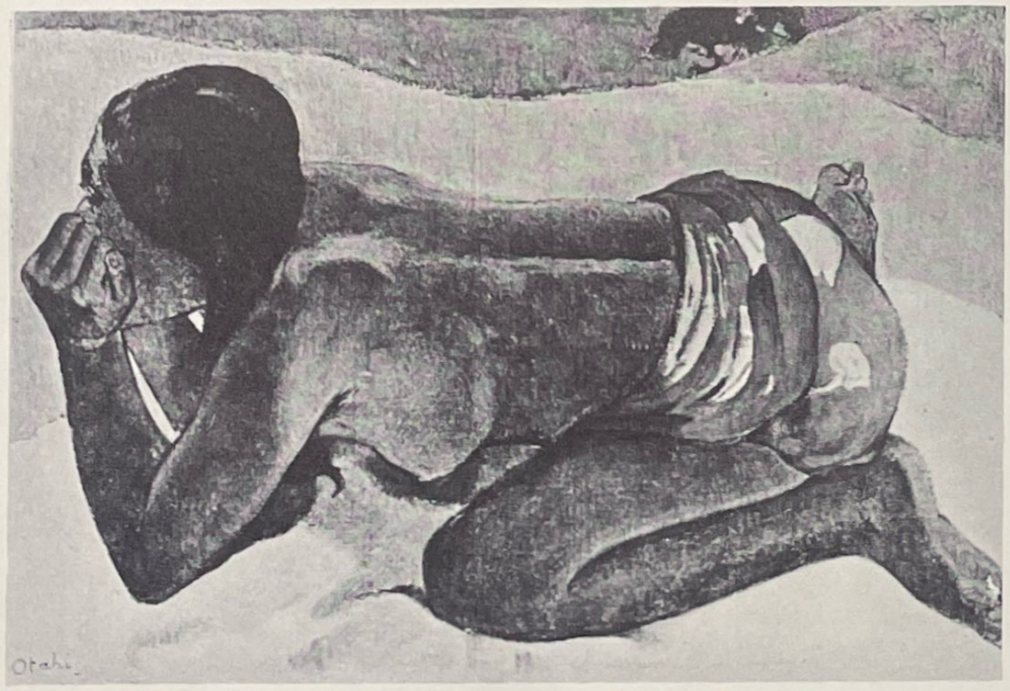
The figure is presented with a strong quality of realism in spite of the broad handling, chiefly because the artist is thinking in terms of solid form. Detail is ignored; planes of light serve to indicate the cylinders of the arms, legs, and torso. To emphasize the curves of the figure the artist has set it against a background composed chiefly of rectangular forms and shapes.

MICHELANGELO. The Fall of Man (Detail)

The monumental figures of Adam and Eve which decorate the Sistine Chapel represent one of the high points in figure drawing. As befits the subject, the forms are heroic and massive. Throughout this complex figure design the artist has employed distortion deliberately to express the dramatic gesture of the action as powerfully as possible. Michelangelo is using the human figure creatively to tell an epic story. That he has succeeded is the common testimony of the ages.

Photo Vizzanova

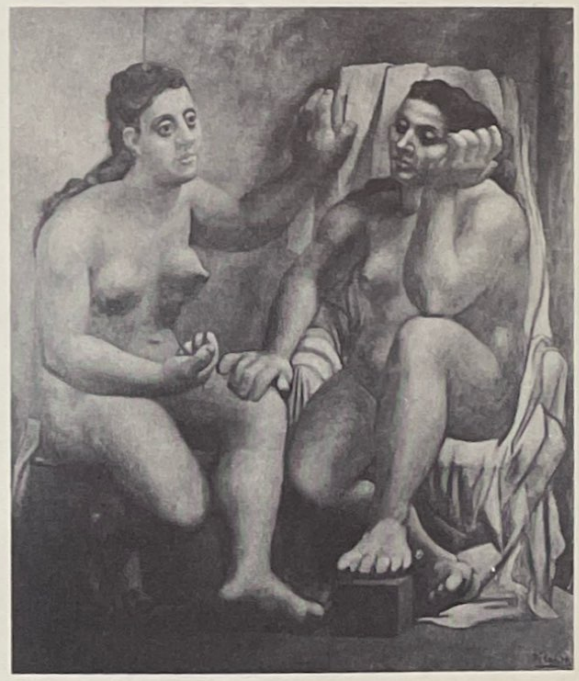
Collection Mme. O. Sainsere, Paris



GAUGUIN. "Otahi" (Alone)

This unusual, brooding pose appealed to the artist primarily because of the interesting shape described by the silhouette. This shape is accentuated by displaying the figure against planes of perfectly flat color. At the same time the figure has been presented as solid form through modeling and cast shadows. Playing three-dimensional form against flat planes in this way creates a very decorative effect, halfway between realistic painting and abstraction.

Collection Walter P. Chrysler, Jr.



PICASSO. Two Seated Women

The figures in this painting from Picasso's "classic" period are seen as elemental basic forms. All accidental details are eliminated and many of the elements, like the hands, feet, and features, are exaggerated in bulk. Strong modeling accentuates the form. The total effect is monumental and massive; it is as though these figures had been hewn out of stone.

FAMOUS ARTISTS PAINTING COURSE

Student Work

Lesson 6 -- Human Form

ASSIGNMENT -- To Mail to the School for Criticism:

Your work for this lesson will consist of two different parts, listed below as Assignment 6-A and Assignment 6-B. Please do both parts and send them in for criticism.

6-A. Basic form sketches without background. Make two sketches in pencil or charcoal of the basic figure. You may work from life; or, if you prefer, you will find many photographs throughout the Course quite suitable for such analysis. We say "analysis" because that is essentially the object of basic form drawing. It is a training in becoming acquainted with the solidity and bulk of the human form. If you mentally follow your pencil around the form as you sketch, you will in time begin to sense the dimension of the individual parts and learn to communicate this awareness convincingly. The purpose of this lesson is to help you develop this quality of awareness.

Avoid any tendency toward indicating the "other side" self-consciously and meticulously. As you draw, relax. Don't attempt to copy the kind of lines and the technique you see in the lesson diagrams. Draw in your own way, in your own style, just as each of the artists did in the demonstration drawings on Pages 22 and 23. Swing the figure forms in rhythmically. Your study of this lesson has shown you the principles of human form drawing -- now draw the figure in your own way.

6-B. A painting of a single figure in a simple setting. Try to follow through with the thinking you did in making the sketches for 6-A. Paint in your own manner, to make the figure sit or stand with weight and conviction, in three-dimensional space. Relate the space to the figure, and the figure to the space. To do this, you must be most perceptive in handling edges. Soften them so that they seem to melt figure and background together where that is advisable. In other places handle them so that they stand out sharply. Be very careful to observe how edges are affected by direct light, reflected light, or absence of light.

Paint only the big forms -- the basic forms as you have studied them in this lesson. Don't attempt to make the figure realistic in the sense that it contains details like eyes, nose, mouth, fingers, or toes. We'll get to that later. Concentrate now on painting the generalized basic form of the figure.

* * * *

The pencil or charcoal drawing can be any size you wish, but not larger than 16 x 20 inches. Be sure to fix the drawings.
Your painting should be in full color.
Work in any medium except pastel on a surface suitable to that medium.
Make the painting 16 x 20 inches in size.
Be sure the painting is thoroughly dry before you mail it in.
If you use stretched canvas remove the stretchers before placing it in the special mailing container.

(Over)

Do not mat or frame any picture you send us for criticism.
On the back of your picture, be sure to letter:

Your name
Your student number
Your address
Your assignment number

Mail the painting to

THE FAMOUS ARTISTS PAINTING COURSE
WESTPORT, CONNECTICUT